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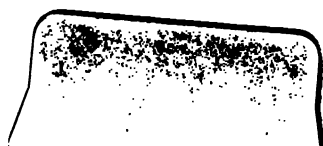
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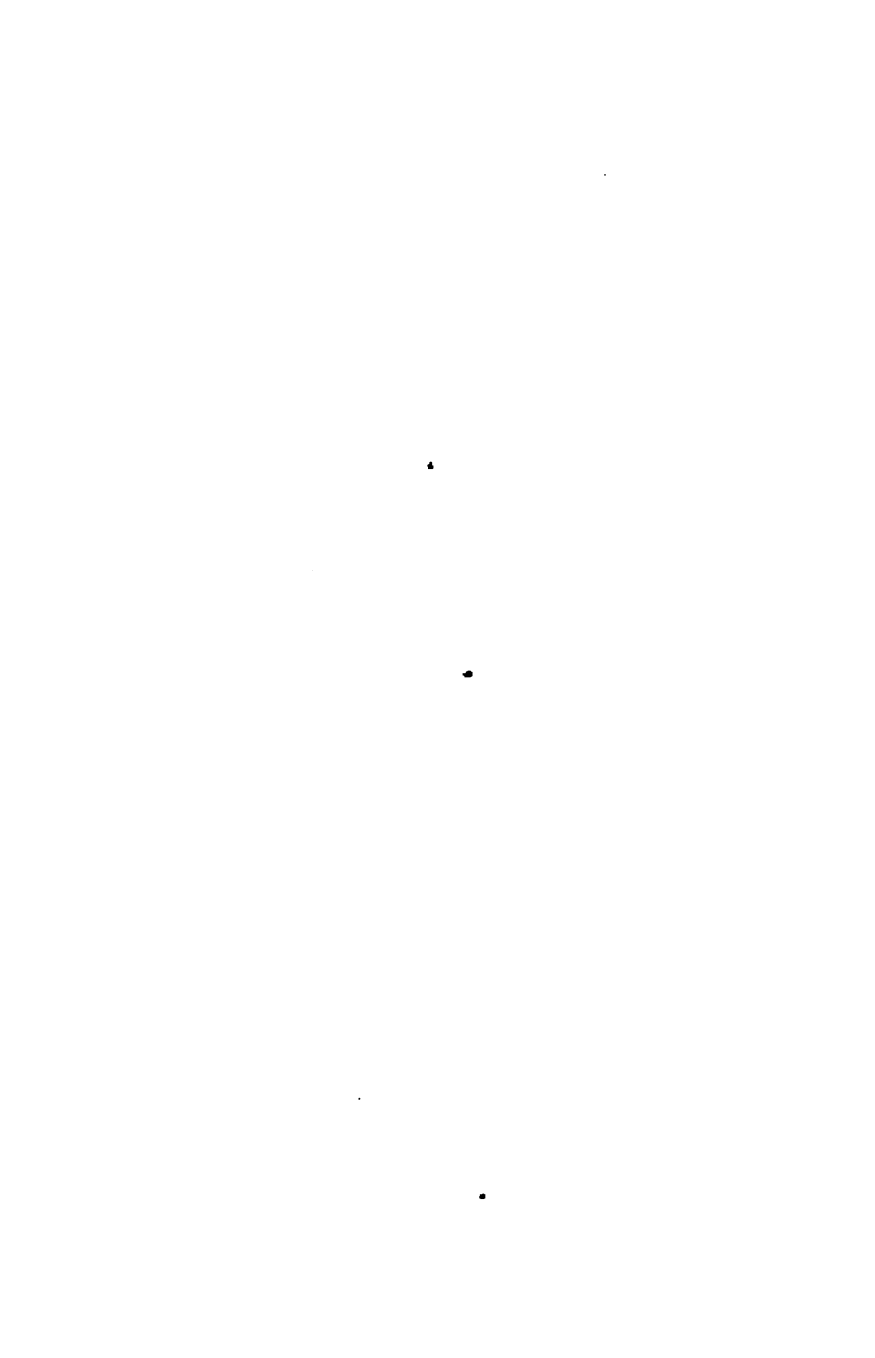
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MONOGRAPH OF THE GENUS *TRIFOLIUM*



London. Published by John Van Nostrand May, 1852.

WALKS AFTER WILD FLOWERS;

OR,

THE BOTANY OF THE BOHEREENS.

BY

RICHARD DOWDEN (RICHARD).



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P R E F A C E.

THIS Botanical appropriation of some half-hours of husbanded leisure does not require much explanation or apology. Scientific works on Native Botany are not scarce; but as I have made some time pleasant by composing and compiling the following botanical chit-chat, if I can interest persons who have a little leisure in a similar resource, I shall have effected two objects—one, the gathering up of my own desultory notices on plants, and the other, that of inducing some of my readers to ramble among our wild flowers, and by learning them attain to loving them. Let me here, in the way of dedication, say, that I seek to return through others a portion of what I have most liberally received, although restrained by my niggard opportunity from repaying any fair portion of what I owe to the chief promoter of scientific acquirement in Cork. The venerable

and Rev. Thos. Dix Hincks, LL.D., has invited many persons to enter the paths of knowledge, whose eminent or humble progress had his aid and encouragement; if the example of philanthropist, philosopher, and scholar, could aid teachings, his life is an illustration of all these excellencies. To develop and produce in full activity that law of our nature which delights to recognise the Creator's goodness in especial, and all his attributes generally, in the things he has created and pronounced "very good," was the constant, the intelligent, the happy labour in which Dr. Hincks was successful. All the members of his family give testimony to his diligence: the name is associated with scholarship in its widest diffusion; but with the branch of knowledge Dr. Hincks most preferred, Botany, we have most to do at present. It is the cheapest of sciences, not requiring any costly apparatus for its acquirement; its application for profitable knowledge in agriculture, horticulture, or arboriculture, is too obvious to require statement here. I have most to do with plant-history as a pleasure; as a means of meeting more acquaintances in the fields; as a kind of knowledge which may be called up by the convalescent in search

of health, or by the wanderer on long and weary roads, which he might without some such pastime have found tedious enough to travel. But the fields and flowers ought also to be places and creatures bringing intelligent pleasures to the joyous and the energetic. A way-side acquaintance with the creations of vegetable life is a great boon. Like an intimacy with human beings, a familiar knowledge of the birth, parentage, and habits of plants makes us love them, bidding us take a vivid interest in all we know and recognise about them.

Any hearty pursuit is generally a pleasure: Burns, when he objurgates the evils of Despondency, declares the value of a purpose, showing that, even when we do not seek an eminently high attainment, an innocent object vigorously aimed at, is of itself invigoration:—

“Happy ye sons of busy life,
Who, equal to the bustling strife,
No other view regard:
Even when the wished end's deny'd,
Yet while the busy means are ply'd,
They bring their own reward.”

The powerful and the active of our race may have a ready and energetic pleasure in useful

occupations ; but these resources have quiet attractions also for persons of less physical power. The valetudinarian, who knows how to improve his hours of debility-inflicted leisure, enjoys a deep sense of thankfulness if he has been taught to apply any acquirements in science or literature, so as to perceive that many hours of uneasiness are thus soothed and made calm—nay, almost pleasurable to him. Vivacity of enjoyment he may not attain to, but how sincere must be his gratitude to find that he can abandon his weary languors, and wander away into fields and among flowers by means of the love of Botanical Literature, and that when his too sensitive frame may not be permitted to encounter them except by recollection and in idea. The notes of this little work were gathered at such a season. During the Spring of 1847, the third year of our potato scarcity, and the second of our famine, fever raged among the poor ; and fitly because those who had more of this world's goods than others should not forget their perishing brethren, the disease spread into all classes. Anxiety of mind and over-exertion predisposed some to the malady, unknown or unnoticed causes exposed others, and among the numerous sufferers

I was one. After having been brought very near to death, I was sent back to the duties of this life once more,—my long and virulent fever resulted in little acute suffering, but in much prostration ; death, however, would have been a little thing compared to the sufferings which might, and which commonly do, attend this disease ; I, on the contrary, was spared all acute distress, even when in the worst state. Convalescent, and capable of feeling gratitude, I rejoiced to perceive with a heartiness of sincere acknowledgment beyond expression, the deep thankfulness which my comparatively easy, though dilatory, recovery, induced. During that period of caution and carefulness, my hours of debility were often stolen away by making notes for my Botany in the Bohereens ; and now that I have been enabled with renewed vigour to take open air “ Walks after Wild Flowers,” I want, as before hinted, to pay my debt of thankfulness by seeking to give to others the enjoyment of a profitable pleasure, which to me was a solace and support during Nature’s very enfeebled extremity.

The appearance of this botanical gathering in a letter-like style, is accounted for by its first

having "leafed" in "The Cork Magazine," then more ambitiously in "The Advocate," a Dublin Journal of considerable scientific promotiveness; it has at length culminated to a high point of honour in the hands of a London Publisher, but owes much of its scientific accuracy to Mr. C. C. Babington, of Cambridge, who has kindly examined the printer's proofsheets and favoured me with remarks upon them. Now as a volume it is offered, with good hope, to the healthy in their healthiest rambles, and for the delicate as a stimulant towards gentle exertion, that best restorative of energy the wild-wood walk, with a pleasant pursuit to aid its interest.

This volume is intended as a familiar description of native plants, containing from the Crowfoots to the Crossworts inclusive.

RICHARD DOWDEN (RICHARD).

CORK, *April*, 1852.

N.B.—I have also to thank a kind lady friend for the pretty and tasteful illustrative vignette which ushers in these pages; but I may not give her name to the reader without hurting her modest secrecy.

WALKS AFTER WILD FLOWERS.

CHAPTER I.

INTRODUCTION INTO THE GREEN LANES; INVITATION TO AN ACQUAINTANCE WITH THE BEAUTIES OF OUR WILD-FLOWERS, AND THEIR FAMILIAR HISTORIES.—THE LOVE OF FLOWERS COEVAL WITH OUR RACE; WE RETAIN THAT PORTION OF OUR PRIMITIVE TENDENCY AS ENJOYED IN PARADISE; IT IS AN EMANATION OF OUR BEST NATURE WHICH OUGHT TO BE ENCOURAGED AND EDUCATED.—“LITTLE-ROADS,” THE “BOHEREENS” OF THE ANCIENT CELTIC TONGUE ARE THE BEST PLACES TO BOTANIZE; “ROADLETS,” AS THEY MAY BE TRANSLATED GIVE SHELTER TO PLANTS, AND KINDLY INVITE THE VISITOR WHO SEEKS THEIR INTIMACY.—THE NATURAL ORDER OF GROUPING IS RECOMMENDED; IT GENERALIZES, WHILE THE LINNÆAN SYSTEM HARDLY DOES MORE THAN INDIVIDUALIZE THE VEGETABLE FAMILY.—THE BIOGRAPHY BEGUN WITH THE CROWFOOT-TRIBE OF PLANTS; VIZ., VIRGIN’S BOWER, MEADOW RUE, FEATHERED COLUMBINE OR GOLD-FLOWERED THALIA.—PROPERTIES OF THE DESCRIBED PLANTS: THEIR ADAPTATION IN SHRUBBERIES OR PARTERRES, ETC.

PERMIT me to introduce the reader to some summer-hours’ rambling and ruralising; perhaps I may thereby be able to add new inducements for those who

“All the pleasure prove,
That hills and valleys, dale and field,
And all the craggy mountains yield;”

or invite others to make leisure and form acquaintances among the wild aborigines of our green

lanes and hedges, natives who love the soil and flourish there—who neither emigrate nor become absentees, but present themselves as Irish phenomena, the true *adscripta gleba*, yet urgent with health, vigour, and beauty. It is true, we have not the Italian May of Thompson's "Seasons" to compel us abroad; and even when our soft Irish Lady Summer brightens on us, she often comes with

"The tear and the smile in her eye."

Well, then, let us pay earnest court to the beautiful Inconstant, recognise all her kindly influences, and follow her flowery track, which, even with the dewy shower on it, is full of bloom and richness. It is but permitting nature to have proper sway, when we yield to the impulse which speaks in us whispering thus to "love fields and flowers." Look at the child in the meadow, see how he accumulates an exuberant store of daisies and cowslips—he makes himself affluent with the gold and silver riches of the field; and this is merely the instinctive love of forms of beauty and gayest colours. He first indulges the susceptibility for gratification by the eye; as he advances in knowledge and observation, he adds to the value of his Flora the luxury of perfume; the violet and the woodbine have now a new power to entice him, they are scented; but he goes farther, he becomes to a certain extent a biographer of flowers; he learns something of their history and of the sentiment which they illustrate, although he does not know that he is thus far a botanist. The love of living creatures is natural to us; we begin with our own species, continue it to animals, and

then even to vegetable existences we become not indifferent.

We acknowledge with delight the almost animate breathing which exhales from the rose; and we expatiate on the elegant contour of the lady-like lily. To these instinctive recognitions of the life of the vegetable world, must be added others of sentiment and association; our hours of delight have often been enjoyed in green fields and gardens; and even those who have been but rarely permitted to make visits where rural felicity had its free flow, are still true believers in the Eden which verdure and flowers and fresh air can so well imitate. No wonder Adam and Eve left their garden with regret; Milton gave us our grand-ancestor's farewell to it:—

“ Must I then leave thee, Paradise? thus leave
Thee, native soil, these happy walks and shades,
Fit haunt of gods!” * * *

“ O Flowers,
Which I bred up with tender hand,
From the first opening bud, and gave ye names,
Who now shall rear ye to the sun, or rank
Your tribes?” * * *

“ With what to sight or smell was sweet
How shall I part?”

Shakspeare, who recorded human nature in his gaiety as well as in his pathos, has made even the sensualist Falstaff a subject for our sympathies, by reviving in him his susceptibility for earlier and purer tastes; in his dying hour, it is told of him, that the thoughts of his childhood and its pleasures were restored to him:—

“ He babbled of green fields.”

I once saw in the great city of London the love of nature pourtrayed. A poor woman came with a child into Covent Garden market to make her small purchase ; some grass had fallen from a fruit basket—it was fresh and green ; she gathered a small bunch of it like a nosegay in her hand, and solicitously asked permission to take it ; it was given her, she placed it in her child's bosom, thanked the donor, dropped a tear and departed. It was a scene for Sterne to have witnessed and soliloquised on ; he would have imagined how the narrow city lane which had blanched the pale thin woman's cheek, had yet with its sickly air failed to destroy her love of the country, and had still left to her associations with rural happiness so powerful, as to make the freshness of that bunch of grass win a tear from her sensibility to this *rus in urbe* in miniature. I want to give pleasure to pedestrians ; I want to make them god-fathers and god-mothers to all the new births of the teeming spring, and to call them by their names, and know them, and by taking knowledge of them to love them. I want every summer-flower to be appreciated ; and the seed and fruit of autumn to be understood and welcomed ; as to winter, when it comes, for the season which is truly naked and bare never comes in our emerald isle, the "dead season" is yet fully alive to him who observes nature even as it

" Grows again tow'rd earth."

The celebrated Bishop Berkley wrote from Cloyne, and said, " in this country where there is no winter ;" and surely he was scarcely too lauda-

tory of our country's south-eastern climate, for at Cloyne the grass is green always, the golden furze is "unprofitably gay," and "the daisy never dies." The good Bishop's meteorology was more evinced by facts than were his cures infallible by tar-water. With this introduction, then, let us begin our "*Walks after Wild Flowers*." The Linnæan system of Botany is the easiest for a beginner, who wants to learn species and genus; and for that purpose the best book extant on Irish Botany is Lady Kane's "Flora of Ireland;" but as my labour is intended to be more a botanical biography than a systematic production, I follow Dr. Mackay's "Flora Hibernica," and adopt the method which is called that of "The natural orders in Botany." We begin our tour through the vegetable world with the flowering plants, whose blossoming is obvious, and which are of course more attractive than those whose fructification is more obscure. Perhaps it may be undervaluing the knowledge of many readers, to invite them to the study of plants by analogies with our own structure; but let them tell young children about it, let them give the little philosophers this message, and they will be pleased with the result; tell these young inquirers that plants are alive, that, although their life is of a different kind from ours,

" Full nature swarms with life."

Tell them that they can find in plants the woody fibre, giving them rigidity and strength like bones; vessels circulating juices like blood to nourish and repair, leaves for lungs, and a skin which can

perspire to preserve health ; rosy blossoms which laugh ; and seeds or buds, the little infants which, under the vivifying influence of light, water, and air, spring into active existence, and perpetuate the beautiful and interesting flowery races. Now for "St. Patrick's Park ;" our native plants are those which are found so certainly wild as to leave no doubt that they are inhabitants of the country ; we also claim some as natives, which if only naturalized, are distributed in places remote from cultivation, and as there is no record of their introduction, we receive them into our community as true Hibernians.

The first natural order of flowering plants, is that which has the *Ranunculus* as its typical leader ; all this group have more or less of the qualities and structure which are most perfectly exhibited in the leading and name-giving plant. They are therefore called the *Ranunculus* or Crowfoot family. The first plant in this order is the *Clematis*, so called from the Greek word "*Klema*," a shoot of a vine, because the stems twine like a vine ; this genus is divided into species of which we can claim but one as native ; it is called *Vitalba*, *Vita-alba*, the white vine, either from the light green colour of its leaves, or from the snowy head of down which its seeds bear, and which is called "the old man's beard ;" the leaves spread like wings from the angular woody branches, which wreath themselves firmly into the boughs of trees ; and making a good shade it deserves its name, "*Virgin's Bower*." It is also called "*Viorna*," *via way*, and "*ornare*," to ornament, from its gay festoons being highly decora-

tive and graceful, making it well deserve another pleasing character, namely, "The Traveller's Joy." If you want to construct an almost extemporaneous bower, plant sufficiently firmly the skeletons of a couple or three dead forest-trees, at their feet then insert your Clematis, and you shall see what "*a climber 'tis.*" In even one season it will throw its lightly verdant skreen quite over your rustic seat. It is a rampant Rambler, and though in its youth it sustains itself upon these aged trees, in a few years it will support their decaying branches by its firm but curiously wreathed, contorted, and lithe limbs, "pliant yet strong;" the toughness of its "withies" enables it to be used for binding bundles or faggots of brushwood, called in Ireland a "*brusna*;" the word is from the same Celtic root that gives origin to the Latin "*bruscus*" and the French "*brusque*," the connexion is obvious. If the woody limbs are cut across they are full of air vessels, and worthy of being examined by a microscope. When dried, boys light one end of the twigs of Clematis wood, and smoke them as some do ratan. It is likely that the smoke of this acrid shrub, may have some slightly stimulating power to recommend its use in this way. This species of Clematis has not a showy blossom; its flower-leaves being of a greenish white, as are also its numerous stamens—the little thread-like bundles amidst the blossom-leaves; but this temporary deficiency is richly compensated when its seeds arrive at some size, as they are then furnished with delicate silky tails, shining with that colour described by Shakspeare as,

"The Silver with her virgin hue."

They are beautifully woven with a pearly feathering, and if kept for a dried bouquet, should be hung with the heads downward, to prevent their tufts from being too diffuse, and thus losing some of their most elegant tufted and rotund form. This plant will clamber to the height of twenty or thirty feet, to hang its tassels in the autumn sun; it blooms in July, and its blossoms are said to have an almond scent; it is very slight, however, and the blooms must be in great quantity to have it perceived; it is consequently a trifling, unimposing characteristic, and is diminished still more in value by comparison with the powerfully sweet smell of another species, the *Clematis Flammula*, whose hawthorn odour will perfume a large garden when it exhales strongest in a fine evening; this latter is a native of the continent of Europe, though a welcome visitor in our island-gardens, where it might, from blossom and perfume, be called autumnal Hawthorn. The author of "The Journal of a Naturalist" says, that the awned seeds of the old man's beard are gathered by mice, probably with a view to line their nests, as the seeds are very small, and could give but little food. The shining, pale-green curls of silk, worthy to be hair of mermaids, become grey as winter advances, but if the once vigorous flower-branch, in late October exhibits a hoary head, and at last becomes disfigured and bald, it is not until its progeny of seeds has been distributed on the winds, and borne up by gossamer parachutes to pinnacles of old castles and crevices in mountain cliffs, to take up an abode; choosing chiefly, however,

for a cradle our plentiful and picturesque limestone rocks, shortly after to adorn their rugged eminences with graceful wreathings and varied verdant clusterings. The stem of the leaf itself is

“ A tendril accustomed to cling;
Let it grow where it will, cannot flourish alone,
But will lean to the nearest and kindest thing
It can twine with itself, and make closely its own.”

The salient shoots seem to project themselves with their expanded arms into the air, seeking some friendly support to clasp and adhere to. The succulent young shoots have not the great acridness of the more advanced branches, neither is this species of *Clematis* so deleterious as others of the tribe, though probably the bruised leaves would blister tender parts of the skin, on account of its juices being undoubtedly more or less poisonous. Paper has been made from the seed-feathering; but probably in a commercial point of view it would not be worth gathering for that purpose.

In a green state this plant *has* been used to stimulate the skin, and, like all acrid poisons, it may be used to blister or irritate in different degrees, but lunar caustic and other more convenient applications have rendered such escharotics unnecessary, and we will chiefly attend to it in its more elegant and rural uses, and know it when we meet it as the best “arbour-vine,” which can make it an inviting retreat to—

“ Steal into the pleached bower,
Where Honey-suckles, ripened by the sun,
Forbid the sun to enter; like favourites,
Made proud by princes, that advance their pride
Against the power that bred it.”—*Shakspeare*.

I have dwelt long on Virgin's Bower because it is desirable that sylvan seats should often present their invitation to wanderers. Every view-point has its power of contrast heightened by preventing the direct light from falling on the place you look from ; to enhance then the vividness, and, of course, the power of the prospect, to gratify the taste by the decorative effect of a tasteful rural structure, and to provide rest and shelter at the vista summit of the wood-path, let it terminate ornamentally and usefully in the elegance of an arbour twined with Traveller's Joy.

The next genus of our native flowers is *Thalictrum*, called from the Greek word "*Thallo*," to be verdant or flourishing ; the young shoots of the plant being of a particularly vigorous green colour. The species of this plant are rarely found wild, so the young botanist had better go to gardens to see the characters of it which are most worthy of notice. There are four Irish species recorded: none of them have petals, that is blossom-leaves ; but the stamens, threads, or filaments, on which the pollen-cases or anthers, are suspended, are numerous and showy. The common name, Meadow Rue, is given to it from the incised leaves of the best known species being sea-green in colour, and also formed somewhat like rue. The blossom of the common rue has also a yellow colour, like some of the plants we are examining.

The first species is the alpine Meadow Rue ; it is found wild on alpine limestone rocks in Sligo, and, as Lady Kane notices, also in Galway. It blossoms with a simple terminal cluster of whitish flowers in June, and grows about thirty-six inches high.

The lesser Meadow Rue has its leaves much divided; in botanical language, doubly-pinnated, from *pinnæ*, the quills of a wing: the sections or leaflets are divided in threes, or ternate; the colour of the leaves at both sides is sea-green; the stems are zig-zag or bent-jointed; the flowers are pale purple, and form pendulous panicles in July. It is worth being particular with this species, because its discovery and examination may add botanical interest to the other pleasures which can be enjoyed in a ramble on the sand-hills of Baldoyle, near Dublin, or amidst the magnificent cliffs in the gap of Dunloe, during a tour to Killarney.

The next species is the greater Meadow Rue, which is more rare, and is only of scientific interest: the Floral inquirer can therefore refer to systematic books for its distinctions.

Lastly, we have the *Thalictrum flavum*, or yellowish buff-colour-flowered species,—the common Meadow Rue, or Feathered Columbine of the gardens: it is a striking looking herb, which has its robust stem four feet high, erect and furrowed. Its numerous branches are leafy, and the lobes of the leaves vary in breadth; its stalk and the footstalks of the leaves are sometimes tinged with purplish green. It blows in June and July, producing to view its ornamental feathery panicles of flowers, with the stamens profusely dusted with yellow pollen, the fertilizing powder of the fructification. The bright yellowness of the anthers prevents the cream-colour of the filament from being much noticed. It is a quick grower. *Thallo*, from which *Thalictrum* is derived, was the name

Of one of the Horæ of the imaginative Greeks : these Horæ, Hours or Seasons, were daughters of Sol and Chronis, the Sun and Time, the last becoming for the occasion a female. These smiling Hours were dry-nurses to the goddess of Love, and her dressers and fashioners ; they were born in Spring, and ever drew up something vivacious and beautiful in their path ; and mild and temperate weather was looked for when they approached the earth. The name of Thalia, given to one of the muses, and also to one of the graces or charities, is derived from the same Greek word *Thallo*, to flourish verdantly ; because what is gay, amiable, kind, and pleasant, ought never to wither, but ought to remain vigorous and energetic for ever. The Thalia of the poets "wore a robe of gold ;" and our *Thalictrum flavum*, in like manner, is rich in her yellow bloom.

This rampant-growing acquaintance of ours will, in gardens, require a little restraint. It may have its freedom in a shrubbery, but if you indulge it with a flower-plateau residence, you will have at times to lessen its license, and limit it at the heels ; in fact, to dig up its too spreading roots, and divide it,—this proceeding will reveal to you more of its character,—these roots are of a deep yellow, and have been used to dye of that colour ; but the ancient medical doctrine of signatures, or the idea that the colour of a plant pointed out its uses, gave the yellow tint formerly a greater value ; the jaundice was supposed to be cured by it, and the terminal "*ictum*" or "*icterum*," in its generic name, probably means of, or for, "*icterus*," the jaundice.

On passing away from this plant, let us remark how, though Pope says—

“That all looks yellow to the jaundiced eye,”—

it is a poetical fiction; the jaundiced eye looks yellow to all, but the sufferer's sense of colour is not altered by the stain in the small vessels of the eye-balls. Agriculturally speaking, the Meadow Rue is an acrid plant, nevertheless cattle eat it when it gets mixed in grass: to grow weeds, however, is a symptom of very bad farming.

I have spent thus much of time in inviting my readers to become acquainted with our native plants. I have avoided technical science, and given them the mere gossip, for a “science-made-easy,” may perhaps have its use; and at length a well-informed love of nature, and of nature's wild retreats, may be diffused; producing, as the author of the “Pleasures of Imagination” so well describes—

“Joy serene

As airs that fan the summer. Oh, attend
Whoe'er thou art whom these delights can touch,
Whose candid bosom the refining love
Of nature warms, oh! listen to my song;
And I will guide thee to her favourite walks,
And teach thy solitude her voice to hear,
And point her loveliest features to thy view.”

CHAPTER II.

NATIVE ANEMONES: WHITE, PINK, AND BLUE.—POLYANDROUS FLOWERS.—ACRID PLANTS EATEN BY GOATS; HOW THESE CAPRIOLATING CREATURES BRING DOWN MILK FROM THE MOUNTAINS.—ORIGIN OF THE TINT OF THE ANEMONE BY OVID.—STORY OF VENUS AND ADONIS.—RANUNCULUS: THE COMPANION OF INFANT FROGS.—LEAVES CROWFOOTED.—WONDERS OF THE WATER CROWFOOT.—WATER BUTTER-CUPS.—BLISTERING BUTTER-CUPS.—FIGWORT CROWFOOT.—SHOWERS OF WHEAT.—GOLDBLOCKS.—WICKED OR CELERY-LEAVED CROWFOOT: ITS ACRI-MONIOUS SALT.—KING-CUPS; AND DOUBLE-GARDEN KING-CUPS, OR GOLDEN BACHELOR'S BUTTONS.—CUCKOO-BUDS.—BULBOUS BUTTER-CUPS.—HOW BUTTER IS MADE YELLOW IN SUMMER.—HAIRY CROWFOOT.—CORN-FIELD CROWFOOT: IT IS VERY POISONOUS WHEN GROWING.—LITTLE-FLOWERED RANUNCULUS: HOW TO TORTURE AWAY THE TOOTHACHE WITH IT.—OBSERVATIONS ON NATURAL GROUPINGS OF PLANTS.

THE next group of our wild flowers which we must look for are the Anemones, named from the Greek word "*anemos*," the Wind; because our native Anemones bloom in blustering March,

"When the stormy winds do blow."

Our first species is the *Anemone nemorosa*, the Anemone of the woods. In early Spring it gives its cheerful green leaves, purplish flower-stalk, and white starry flowers, in profusion to the admiration of the lover of the woodland brake. In fine bright weather, the blossoms boldly expand their healthy countenances to the vigour-giving breeze, and look for purity of whiteness from the face of "the blessed sun himself;" but when daylight has nearly departed, or in wet weather, the

blossom bends its head to protect itself, and presents its poll, if you take the flower as the plant's face, like a cunning creature wisely turning its back when there is "wet in the wind," to prevent the pollen from being washed away, and thus leaving its nascent progeny, the seeds, deprived of the necessary stimulant to their growth and perfection. There is a variety of this flower with pink petals which has been found by the Lee, under Mount-Desart; also at Donnybrook; at Ballinhassig glen; and I think I have got it at the Bishop's brook, near Inch-a-Gaggin. The whole plant of this variety is larger both in leaves and blossoms than the white one. We next find the *Anemone Appenina*, or Blue Mountain Anemone: it is recorded as a native by Dr. Mackay. He states that it is probably not indigenous, and consequently can scarcely be sought for with success in a state of nature; but it is so pleasing a flower, that it ought to be introduced in groves along with its more usual relative. Its blossom, as its familiar name indicates, is of a beautiful light blue.

Appenina does not point to an exclusive mountain residence, for in Italy, where it is very common, it is found plentifully in lowland woods. A dry, light, loamy soil, with a good amount of vegetable earth, is the best nurse of these *Anemones*, when in gardens. We can only claim as visitors those splendidly coloured varieties, which dazzle the eye in flower knots in Spring plentifully, but more sparingly in the Autumn; they are denizens of more sun-bright lands than ours, being introduced from the Levant and from Italy;

but even under their own bright skies they have not attained the beauty that skill and fostering has here conferred on them, the single flowers having been made semi-double by culture. The whole family have many stamens, which give name to the Linnæan class Polyandria, from "*polus*" many, and "*aner*," the male, or stamen in Greek. These stamens or thread-like processes a very high culture renders abortive, and changes them into coloured blossom-leaves; this is the great object of the flower-propagator; he secures the seeds of the plants which are undergoing this change to partial sterility; and by watching their increase, gets rid of the more natural flowers, and multiplies those which are richest in the beautiful monstrosity sought for. But if every stamen "*incrassates*" into a petal, the plant cannot perfect seed; and such is the case of the fully double variety of our wood-anemone; but this lovely child of our groves compensates its deficiency in two ways; its vivacious roots are plentiful, and the ivory-white carving which crowns its handsome blossom-stalk, remains much longer to gratify the pleased observer, than that of its simpler grand-parent.

The Anemone is an acrid plant, horses and swine refuse it; sheep will, if allowed, crop it; but it has on them a drastic deleterious effect. Goats, however, who eat many coarse things, seem to enjoy as a stimulant this herbage, which would be an acute poison to other animals. Apropos to goats, *D'Une Chevrette Sauvage*, these *capri* seem as if they could secrete milk out of a bundle of "*botheens*" (walking-sticks); who has

not seen them on some mountain's side, clipping off the arid briars for a breakfast. Among our Irish Alps, climbing through the Gap of Dunloe, a guide once told us that "the mountain goats were used like the people; that they had to scramble and struggle all day in the cliffy hills for their poor food, and in the evening they were brought in and milked, to fatten calves, who were botches at gathering the last tuft of dry grass on the precipices."

This ingenious way of mowing the mountain peaks was amusing; but the poor goats—why do they come in the evenings to have their "udders drawn dry" in this manner?

A coadjutor guide explained the puzzle in this manner:

"Now Jack, mind, *Jenny Gower* is not such an omadhaun as you make her; she gathers sense from those butter-tenants of the hills, who get knowing in trade in Cork all the way. In decent weather, your honour, Jenny gets milk enough for her kids, and a little to spare, and she comes down quite natural at night, and swops her surplus for a grain of meal with the hill-farmer; sure you wouldn't see so sprightly and lively a beast as Jenny to be a soft fool like that!"

When the *Anemone* is withering, the leaves and sometimes the petals are sprinkled with a small fungus, for which see "*Sowerby's British Fungi*." Passing from this plant of—

"Blossoms white, tinted with sanguine hue,"

we ask leave to use the poetry which describes the origin of another anemone, the *Pulsatilla*, as

we find it in Ovid's *Metamorphoses*, in the story of Venus and Adonis:—

“Thus cautious Venus school'd her fav'rite boy;
But youthful heat all cautions will destroy.
His faithful hounds led by the tainted wind,
Lodged in thick covert, chanced a boar to find;
The callow hero show'd a manly heart,
And pierc'd the savage with a side-long dart;
The flying savage, wounded, turn'd again—
Wrench'd out the gory dart and foam'd with pain;
But now too late to fly the boar he strove.

* * * * *

On the discolour'd grass Adonis lay,
The monster trampling o'er his beauteous prey—
Fair Cytherea, Cyprus scarce in view,
Heard from afar his groans, and own'd them true,
With cruel blows she beat her guiltless breast,
The Fates upbraided, and her love confest;
For thee, lost youth, my tears and restless pain
Shall in immortal monuments remain:
Then on the blood sweet nectar she bestows;
The scented blood in little bubbles rose:
Short time ensued 'till where the blood was shed,
A flower began to rear its purply head:
Such as on Punic* apples is revealed,
Or in the filmy rind but half concealed.
Still here the fate of lovely forms we see
So sudden fades the sweet Anemone,
The feeble stems to stormy blasts a prey,
Their sickly beauties droop and pine away;
The winds forbid the flowers to flourish long,
Which owe to winds their name† in Grecian song.”

This is the Pasque or Paschal flower, blooming as it does about the period of the Paschal Supper, at the beginning of the Spring, or Good Friday.

* Punica Granatum—Punic Grains, the Pomegranate or Apple of Grains.

† Anemos, Anemone.

Salmon, the herbalist, calls it *Apium Sardoniacum*, it being a poison which if eaten produces that fearful grinning distortion called *Risus Sardonicus*. Its cut leaves caused it to be called Broad Parsley. A more agreeable association shall be now attached to one of its familiar names, "Laughing Parsley," viz., that its pleasant green, and cheerful face, induce gaiety and laughter in the vigorous rambles of hardy March.

The next genus that meets us is *Ranunculus*; so called from "*rana*," the Latin for a frog, and the affix "*unculus*," which is met in our adopted word "*homunculus*," and used as a diminutive, indicating an imperfect birth, like frog-spawn. This name shows that a great number of these plants flourish where animals living in humid places are found; water, marshes, or damp fields, giving the most luxuriant of the group a habitation. The origin of the popular name is obvious; if we place the upper side of a crowfoot leaf on a flat surface, the toes of the "vegetable crow" spread out, while the stalk gives us the shin to hold by.

Ranunculus aquatilis—Water Crowfoot. This beautiful decoration of ponds and streams, or even of the more still parts of large rivers, is one of those interesting plants which make our early summer-botany delightful. It rises from its oozy bed on long green stems, covered with a coat of mucor, which makes them smooth for the water to glide by easily, acting as a lubricating and yielding, but very secure, sheathing; this envelope is of a slightly brownish colour. Above the point where the roots are embedded in the

mud, hangs a fringe of rootlets, ready, as the supporting water gets shallow, to extend the rooting adhesions of the stalk. At the joints of the stalks are found bladder-like investments, these are pairs of stipules, which are translucent, and adhere round the stems. This word stipule may be derived from the Latin *stips*, a small Roman coin, and the disks of these stipulæ have some resemblance to it. The lightness of the plant sustains a large portion of its herbage afloat on the water, and thus it enjoys a copious supply of light and air, stimulants which give vigour and vitality universally. Looking at the structure of this very attractive naiad, it seems to be in part sustained by the flatness of the palmate leaves, laid, like the closed fingers of a good swimmer, on the surface of the water; but the leaves below the surface are by a most interesting provision of nature, cut into bundles of capillary threads, green water-hair, through which the stream runs without disturbing the vegetable from its miry adhesion. When the field botanist looks at the green leaves, and snowy petals of the water-crowfoot, let these provident adaptations of its curious contrivances make part of his intelligent pleasure. This plant, which in May and June is like a floating strawberry bed, has considerable variety in the form of its uncut leaves, and in the length of the capillary ones; also in the number of them which are divided, and this diversity seems to be caused by the richness of the ground it roots in, or by the heat and light of the season. The white blossom has a yellowish claw, by which it adheres to the receptacle for the seeds. With re-

spect to its qualities, it is the least acrid of the whole genus. Dr. Pulteney says in the Linnæan Transactions, that it is not only innoxious to cattle, but that it is nutritious ; and that on the borders of the Avon, the cottagers partly support their cows on it. Cattle, he says, are so extremely fond of it that the farmers have to restrict its use, and not to allow them to eat per day more than twenty pounds of it. It is extremely curious that this aquatic species of *Ranunculus* should be harmless, while we have umbellate plants which are harmless when growing on dry land, but become most poisonous when growing in water. This beautiful strawberry bank, which comes down to bathe in the sunny stream, is called in our poetical Celtic tongue, "Lionan Abhan," water-ladies ; and lady-like flowers they are on the sparkling waters.

The *Ranunculus hederaceus*, Ivy-leaved *Ranunculus*, is a diminutive species, and the smallest Ivy-leaves we have, would be an overgrown similitude to its little kidney-shaped leaves. It is an amphibious reptile-like creature, inhabiting the plashy margins of streams, and living like a true *Rana*, in a moist abode, between land and water ; thus located it crawls about, enjoying a succulent liveliness, and showing its little white blossoms from June to September.

Ranunculus Lingua, Tongue-leaved Crowfoot or great Spear-wort ; the leaf represents a very, very long tongue indeed, but we must bear with many such similitudes : its leaves are in fact spear-shaped, slightly sawed or notched on the edges, and to a certain extent clasping the stout upright stem. It

has fine showy gold-coloured blossoms, and is one of the handsomest of our butter-cups. It blows in July, growing in muddy ditches, out of which soil it rises boldly and attractively. It is an acrid plant, like most of the tribe, and its poisonous character is not modified by its growing in more or less wet places. The caustic principle of the crowfoots has not been traced to acid or alkali; its power is increased by being combined with ardent spirits or sugar, but is rendered inert by slight heating or drying, which accounts for these plants being harmless, except as wasteful weeds, when cut in hay and dried.

Ranunculus Flammula, the *Ranunculus* which causes a little flame on the skin, or an inflammation. The leaves bruised and applied to the surface will raise a blister in about half an hour. This is a sore which it is difficult to heal, and consequently the application may be found useful when a lasting vesication or running sore is surgically required. This plant may be readily recognised on the sides of lakes and muddy ditches, by being of a less robust character than its neighbour, *Ranunculus Lingua*. It is accordingly rightly named the lesser Spearwort; the blossoms are small and of a light gold-yellow; the honey-pore or nectary in the claw of the petals is very small. The long fibrous perennial roots run deep in the ground, and from them spring numerous round, branched, leafy, smooth, hollow stems, spreading in every direction, and sometimes lying prostrate. Dr. Withering, the naturalist, recommended the distilled water of *Ranunculus Flammula* as preferable to any other means for producing instant

vomiting in case of poisoning. Lightfoot describes an ingenious but simple method of using the bruised leaves as a blister; he says that in the Scottish Isles, they fill a limpet shell with the cataplasm, and bind it on the part; the cup-form of the shell neatly defining the place of the blister.

Ranunculus Ficaria, Figwort-Crowfoot or Pilewort: the leaves have somewhat the colour and form of a flattened green fig. Its acrid property has led to its use as a stimulant plaster for indolent tumours, from which it derives its popular name. This is a welcome wild flower in April. The glossy healthy green of its heart-shaped leaves, resembling those of a garden cyclamen, first invite admiration; and then comes its attractive, lively, shining, golden, yellow petals, supported by the yellowish-green calyx which recently formed the curious pix, in which was treasured the yet unopened flower. If you want to transplant this wildling into the bank of some shady stream in your grove, take care to get up its tuberous roots, or your "first-of-April work" will be worthy of the day,—you will lose your plant, and be an April-fool. These little tubers are often exposed to view by the washing of contiguous streams, or the rain; and then, they look somewhat like grains of wheat; this appearance has given origin to the assertion that it has rained wheat. The young leaves of this plant are boiled by the common people in some parts of Sweden, and safely eaten for greens. It is, however, a proof of the deficiency of good vegetables, to see such small substitutes made use of. The seeds of this *Ranunculus* are commonly infertile, but the plant

produces bulbs in the anils of its leaves, and they falling, grow in this viviparous manner. This flower loves the light and sun-shine, and closes its blossoms, for want of their cheering influence, from about five in the evening, till near nine in the morning; and also during wet or very gloomy weather: its Celtic name *Grian*, the sun, tells this point in its history. Annually we see its golden-varnished starry flowers lose their attraction, become pallid, then dead-white, and finally fall off, having perfected but few seeds; but there is a store of life in its pear-shaped tuberous roots, the fascicles of which are like those of the Orchises, renewed year by year.

Ranunculus auricomus.—From "*aureus*," gold, and "*coma*," a lock of hair: Goldilocks,—

"Her sunny locks hang on her temples like a golden fleece."

This plant prefers woods and places which are not swampy for its residence: it does not dislike shade, but generally finds a dry soil most congenial to its habits. The leaves are smooth, those near the root kidney-shaped; on the flower-stalks they are much divided. It is about a foot high. Its flowers, one on each stalklet, are of a deep bright yellow, and its stamens purple. It blooms in April and May. It is worth while to examine with a microscope its honey-pore, which is situated at the bottom of the claw of the petal, and is not hidden by any sheath. Often, the seasons being cold, the corolla is not developed at all; the calyx then becomes more deeply coloured than usual; and within its cincture the stamens fertilize the seeds. This plant differs remarkably from the most gene-

ral effect of the *Ranunculus* tribe, viz., it is not at all acrid, and is consequently called Sweet Wood-Crowfoot.

Ranunculus sceleratus, a Latin surname, attributes to the next crowfoot, flourishing in muddy banks, a dozen evil qualities. Its most innocent discredit is the consequence of its chosen home, being thence called the dirty, defiled, or polluted crowfoot; its feet are always in muddy drains or dykes; the partially drained portions of our newly reclaimed parks are full of it. Secondly, it is "scelerate," because it is acrid, nipping or biting; if chewed it inflames the tongue; even the distilled water of it is intensely acrimonious, and as it cools it deposits crystals which are very insoluble, and have the curious property of being inflammable. Yet with all this acute acidity, it is singular that if the plant be boiled, and the water thrown off, the vegetable is wholesome; and the shepherds in Wallachia use it for food. The third meaning of "scelerate" applies to it the character of being unnatural, cruel, mischievous, and roguish. It is one of the most virulent of all our native plants; the juice is so acrid that if slightly rubbed to the skin, it reddens it; if the application is continued, it causes a blister and a sore. Mr. Francis says, that he himself saw a begging-impostor producing inflammation by this means; this branch of vagrant malingering has not as yet been acquired in Ireland. Popularly, this is called Celery-leaved Crowfoot; its Latin name, though not allied to celery in property, is in sound, and the two words may make a kind of memory-aid for one another. It is called thus

because the lower leaves resemble celery in their deep green colour and glossy smoothness. The stem is round, hollow, and has a pithy whiteness within; the plant is stout, and for so a herbaceous structure looks shrubby. The flowers, which appear in June, and succeed each other until August, are very small, but of a good bright yellow. Being an annual, it may be eradicated by preventing it from perfecting its copious supply of seeds.

We have examined the green and snow-white Scarf of our streams, these pearly plants which cling closely by them. The "starry eye" from the damp dell we have scrutinized; and shining in the marsh, we have seen a plant telling us—

"All is not gold that glistens."

We have followed a bright sylvan into the grove, and now emerging—

"Through the flowery mead,
When lavish Nature, with her best attire,
Clothes the gay Spring,"

we enter on terra firma, and commence our examination of the pasture-growing species. First comes the *Ranunculus acris*; this crowfoot, acrid by pre-eminence among those which adorn the meadows, grows everywhere. In fine Summer it is a showy vigorous-looking plant; all its colours have an enlivening intensity; an old author introduces it as emblematic of the manhood of the months; he says, "June is drawn in a mantle of dark grass-green, and upon his head a garland of bents, KING-CUPS, and maiden hair."

King-Cups are not unsung. We have a poet

for them, George Darley, who gives them a place in a "May-day Melody," as follows:—

"See this bank which the cowslip and cuckoo-bud strews,
To engage your bright looks, gentle Queen of the May;
And a carpet of moss for your delicate shoes,
And woodbine enwreath'd in a canopy gay.

"See this garland of red-maiden posies for you,
A beautiful wreath fit for beauty alone;
Here 's a king-cup of gold, brimming over with dew,
To be kiss'd by a lip just as fresh as its own.

"Here are bracelets of pearl* from the stream in the dale,
That the nymph of the water on you can bestow;
Here 's a white-lily fan, your rich blushes to veil,
Or lie on your bosom, like snow upon snow.

"Here is myrtle sustain'd by a jessamine band,
To show the fond twining of beauty and youth;
Take these emblems of love in your exquisite hand,
For one is the evergreen Sceptre of Truth.

"Then around you we'll dance, and in honour will sing,
While by melody guided we wander away,
Where the hills and the valleys and woodlands shall ring
With your choral chaunt, lovely Queen of the May!"

Beginning at its root we find it thick and elongated, and with many fibres. The stem is boldly erect and about two feet high clothed with stoutish hairs; the calyx spreads, but is not rolled back under its large full golden corolla. Such is its splendour, but alas, though Gay tells us,—

"Fair is the king-cup that in meadow blows,"

we are obliged to reveal its mischievous character. Cattle will not eat it when green. Its lower leaves are sometimes blotched with a suspicious lurid dark hue; and it is so very acrid, that Curtis says, even pulling up the plant with bare hands

* White Water Ranunculus blossoms.

has produced inflammation on a delicate skin. And still there is a drop of honey at the bottom of this royal vase, which the industrious bees secure without danger. In the "Shepherd's Oracles," we are told it was worn by lovers at betrothing time; and its golden colour was dedicated to Hymen in more classical history. Old Quarles says,—

"Love-sick swains
Compose rush-rings and myrtle-berry chains,
And stuck with glorious *king-cups* in their bonnets,
Adorn'd with laurel-slips, chaunt their love sonnets."

A variety of this plant has become double, and long been an inhabitant of gardens, as one of the flowers called Yellow Bachelors' Buttons.

Ranunculus repens, Creeping Crowfoot; *repens et repentini*, Crawling Upstarts; the shoots crawl about the grounds, and then thrust themselves up into notoriety. It is a very common plant; the leaves are of a paler green than those of several other species, and the yellow of the blossom is less deep. This plant also blisters the skin; it grows stoutly in meadows and in waste shady places. It flowers in May, June, July, and August. It is the cuckoo-bud of Shakspeare, so called from its' gaiety in early Summer, accompanying the arrival of the cuckoo in the groves,—

"When daisies pied, and violets blue,
And *cuckoo-buds* of yellow hue,
Do paint the meadows with delight."

And again in King Lear we have it noticed as the cuckoo flower.

We have next the *Ranunculus bulbosus*. The root is short, with few fibres, and no offsets; it is

roundish and solid, perennial by means of forming a new bulb for next year on the top of the old one ; this root is the most acrid part of the plant, for although the juice of the herbage is stimulant and produces sneezing, the root will blister, and it is said with as much certainty, and far less suffering, than Spanish flies. This is our commonest field butter-cup. It was once supposed to give butter that lively yellow tint which indicates superior quality ; but cows do not eat much of this weed ; the fine colour of the butter when butter-cups blow, proceeds from the vigorous health of the cattle, who have then plenty of good grass, which, improving the quality of the milk, enriches the butter. Energy and health always co-exist. Plants revel in the breezes, the showers, and the sun-shine ; and animals get vivid colours, both externally and in all their secretions, from these health-giving stimulants.

It should be remarked, that acrid as it is, pigs will plough a coarse common all over to get at its roots, and they are said to eat it without harm ; it would be well, however, when permitting these animals to eat what poisons others, to be cautious of mistaken statements, which may be costly in their consequences.

Ranunculus hirsutus, the Hairy Pale Crowfoot, is rather a rare Irish plant : when found, it shows its erect vigour on moist grounds, but as it sometimes obtrudes itself on the borders of cultivation, it is well to know that it is an annual. It is reported that a top-dressing of wood or coal ashes will exterminate it, but it may be surely eradicated by preventing it from perfecting its seeds.

The plant wears a silky down as a slight covering, but the calyx or flower-cup is regularly hairy. This large species affords facility for noticing, that when the flowers are only a little opened, there are on the stalk two little palish-yellow leaves, which seem like supports or brackets to the more prominent structure above: these appendages are "bracts;" they fall off when the next tier, the calycine-leaves, enlarge: these again in their turn bend back from the petals, allowing them superiority and the fullest expansion of their tawny-golden beauty to the enriching sun-shine of heaven.

Ranunculus arvensis, from "*arvum*," a ploughed field, the Corn Crowfoot. It is found chiefly in corn-fields and cultivated grounds. It is very different from the butter-cups in appearance; the leaves are pale green, and divided into strap-shaped lobes; the plant is slightly hairy in every part, the root is annual, the stem erect and branched, the blossom leaves are small, and of a pale yellow. It may be remarked here, that in making a *hortus-siccus*, or garden of dried plants, the petals of the bright gold-coloured crowfoots may be fastened with mixed paste and gum to paper, and they will retain their distinguishing shades of colour, if not much exposed to light. The seeds of this species are remarkably armed on the sides with strong spines. This plant should be carefully eradicated from corn-fields. It is, says Sir James Edward Smith, very acrid and dangerous to cattle, *though they are said to eat it greedily*. M. Brugnon, who has given a particular account of its qualities, relates, that three ounces of its juice killed a dog in four mi-

nutes. Near Turin several sheep were killed by eating it, which first led to an investigation of its effects. Cholic, with inflammation of the stomach, were the marked results, which effects were best removed by pouring vinegar down the animals' throats. This poison seems to act in paralyzing the nerves of the stomach, and also in an acrid ulcerating effect, as black spots were found in the stomachs of the sheep.

Our last Irish *Ranunculus* is *R. parviflorus*, Little-flowered. This small plant resembles some of our wild geraniums in its leaves and stems. The leaves are thus roundly heart-shaped, scalloped on the edges, and hairy. It grows in rather a trailing attitude, on coarse arable ground and gravelly or rocky places. Its height is about six to nine inches. The little leaves of the corolla are yellow; the seeds are armed at the sides with hooked prickles. It flowers in May and June. We have not much to record about this diminutive plant. Old Gerard, who found a use for everything, tell us, "that many do use to tie a little of the herb, stamped with salt, unto any of the fingers, against the pain of the toothache;" and he accounts for the cure very cleverly, viz., "which medicine seldome faileth, for it causeth greater pain in the finger than was in the tooth, by means whereof the greater paine taketh awaye the lesse."

In a sketchy biography of plants like this, scientific readers will miss much of that precision and minute distinction which systematic accounts contain; but these matters would be out of place if too largely offered for popular reading. Our

garden *Ranunculus*, in all its splendour and variety, is a native of the Levant ; and we cannot here add even "a peep at the parterre," to vary our "wander after wild flowers;" yet it may be hoped that some persons will make themselves well acquainted with the rural inhabitants of their neighbourhoods, which acquirement will to a certain extent, give an insight into the habits and treatment necessary for the splendid foreign *Ranunculus*, who is everywhere invited to show in gardens

"The blazing brightness of her beauty's beam."

In general, the necessities of a natural group of plants have some relations to one another ; or at least there are sub-series, which may be pretty safely associated ; and as most of the introduced species have types that are natives, observations on their places of flourishing are a good help to successful gardening.

CHAPTER III.

GLOBE-FLOWER.—IMPRESSIONS OF LEAVES.—MARSH-MARIGOLD.—
NATIVE CAPERS.—THE GOWAN.—HELLEBORE.—CHRISTMAS ROSE:
ITS POISONOUS QUALITIES.—ITALIAN POISON COMPOUNDERS
SPOKEN OF BY SHAKESPEARE.—COLUMBINE OR DOVE-PLANT.—
BARBERRY; FICTION IMPUTES TO IT GIVING RED-RUST TO WHEAT.
—IRRITABILITY OF ITS STAMENS, AND OTHER CURIOUS CIRCUM-
STANCES RELATING TO IT.

THE next genus of the order *Ranunculus* with which we meet, is "*Trollius*," so called by Conrad Gesner, because the flower is a sphere, and the German word *Trolen*, means round. To "*troll*," which may be translated to "*trundle*," sing or send round, was a word in general use in the sixteenth and seventeenth centuries; Caliban says in the *Tempest*—

"Let us be jocund: will you troll the catch
You taught me, but while ere?"

Our Irish species the *Trollius europæus*, is, as its specific name indicates, distributed over the temperate parts of Europe. It is not a wild plant in the province of Munster; but is to be found in most gardens, where it is perhaps a little coarsely herbaceous for high finish and select floriculture; in a grove it is an admirable decoration, as its size is not out of keeping with shrubs and trees. The making a collection of portraits of leaves is an agreeable amusement; and those that are crowfoot-formed answer well for this purpose. Of course the pencil produces

the highest order of work in delineations; but there is an extemporaneous method of getting up a Leaf-Picture Cabinet, which requires only a little neatness and patience to be effectual. Lampblack and sweet oil rubbed together make the printing ink, which is to be smoothly painted on stout paper; on this, carefully expand the leaf you want to copy; its most nerve-marked side being undermost; cover your work with a protecting bit of tissue-paper; over which, lay a smooth piece of flannel, and with your fingers press it on the leaf, so as to colour all its elevated points. Spread it in a natural form on white paper, place thick blotting-paper over it, rub the outside, and you will possess a good papyro-graph to "remember you" of your pretty leaves when snow may hide them in the grove, or rain prevent your visiting them.

The Globe-flower raises its very elegant silvery-gold balloon, from its green bed in June and July, but in sheltered groves it keeps blooming until October. Its blossom-leaves drop soon, and expose to view its very rough bundle of green seeds; yet, as it has several blooms on one stem, it is useful in the "beau-pot," being of that soft, pale, moonlight yellow, which suits most colours.

This plant, in common with its natural order, is slightly acrid. It likes a rich, moist soil, but loves a good strong light to flourish under, deriving vigour and colour, as the moon receives her light,

"And her pale fire she snatches from the sun."

Let us take leave of this gentle terrene orb, with an apostrophe fitting her merits,

“Sweet moon, I thank thee for thy sunny beams.”

We now come to a plant which we can easily find in its natural home. How welcome is the glowing flower of our common marsh-marigold, like our well-known garden pot-herb after which it is named, it was formerly worn as a nosegay, its strength of colour, overbearing its somewhat coarse robustness of form; “glorious John” Dryden records its floral fame thus—

“And get soft Hyacinths with iron-blue,
To shade marsh-marigolds of shining hue.”

In “sturdy March” out it brings its golden blossoms, and continues to bloom until June. The stout stems of this plant are creeping, and where they touch the soft soil, they are fringed with rootlets. The succulent leaves are large and roundly-heart-shaped, crenated or crimped at the edges, and much veined on the shining upper surface. Goats and sheep eat these leaves; cows, who have been much confined, will ignorantly crop them; but it is found to be an acrid poison to these animals. It is one of the plants called by the Scotch gowans—

“We twa have rin about the braes,
And pu’d the gowans fine.”—BURNS.

A double variety has been found and introduced into gardens, in them it grows well in rich moist earth, not always requiring a mud-bank habitation. Its name in Botanical Science is “*Caltha*,” from the Greek *Kalathos*, a cup; and in the early Summer, it is gay to see the sunlight

brightening its golden chalice, as it touches the crystal of some sparkling stream.

“Hark, hark ! the lark at heaven’s gate sings
And Phœbus ’gins arise,
His steeds to water at these springs,
On chaliced flowers that lies.”

Shakspeare, who saw everything, and felt everything that was lovely, must have seen this one of nature’s translations; this *Kalathos* is Englished into a chalice at our brooks ; by its fine hue, illustrating a word of similar sound, and appropriate meaning, being our native “*Kalanthe*,” or beautiful flower.

The gowan of Scotland may be traced to its home, and identified as the *Caltha palustris*, or marsh-marigold, in a sweet song of Allen Ramsay’s, from which we take three verses:—

“O Katy wiltu’ gang wi’ me,
And leave the dinsome town awhile?
For blossoms sprout from ilka tree,
And a’ the summer’s gaun to smile.
The mavis, nightingale, and lark,
The bleating lambs and whistling hind
In ilka dale, greenshaw, and park,
Will nourish health and glad your mind.

“Soon as the clear, goodman of day,
Bends to his morning draught of dew,
We’ll gae to some burnside and play,
And gather flow’rs as bright as you.
We’ll pull the daisies on the green,
The lucken gowans frae the bog,
Between-whiles lowly we will lean
And rest upon the velvet fog.

“There’s up beyond a pleasant glen,
A wee piece from my father’s tow’r,
A canny saft and flowery den,
Which circling birks have made a bow’r.

"Whene'er the sun grows high and warm,
We'll to that caller shade remove,
There I will lock thee in mine arm,
And love and kiss and kiss and love."

The *Caltha palustris* is exuberant in "palustrial," or partly submerged places, on the margins of fresh-water rivers, in ozier marshes, and by the sides of lazy streams. Young people should be warned not to put any part of the plant in their mouths, as they are somewhat acrid. The young buds have been pickled for capers, but in our country, if the mutton could be had, the people would find "capers" in themselves, which would be the most piquant sauce to appetite, and would invigorate their stomachs, without the acidity of the *Caltha*-bud, made pungent in vinegar. The juice of the petals, boiled with alum, makes a transitory yellow dye.

Our next genus of native plant is *Helleborus*; its name is constructed from the Greek "*elein*," to injure, and "*bora*," food, indicating its poisonous nature. The meaning of *viridis*, the second part of the name of our species, is obvious; it is all green, even the blossoms, which are of a yellowish-green colour. It is a rare discovery in Ireland for the amateur botanist. The Flora of our country records that "it is found in two places near Middleton, which are, perhaps, the only stations in Ireland where it exists in a truly wild state."

The English Flora contains a second species of this genus, which is not a wild native of Ireland, although it is found very generally in gardens. It has been confounded with our plant by the old

botanists, because it has similar poisonous properties; these qualities we will examine generally, without making a minute botanical distinction between the plants. They have both been called *veratrum*; now the *Veratrum*, or white hellebore of modern pharmacologists, is found in a totally different tribe of plants, and is nearly allied to the Squill, so well known for its useful nauseating power, as a cure for coughs. We cannot properly notice the alkaline principle "*veratria*" here, because it has not been found in hellebore, although the action of it on the system is very similar. The Christmas-rose, called from the colour of its roots, black hellebore, has been chemically examined; its power lies chiefly in an acrid volatile oil, and the constitution of our plant may be generally indicated by attending to that of its near neighbour. The hellebores afforded the ancient pharmacians quite a world to revel in; first the names were a pleasure to them; *ver-atrum*, "the green-black," "*Flore viridi, radix niger.*" Burton, in his anatomy of melancholy, expatiates extensively on it as one of the potential melanagoga, or "go-your-way-melancholy" plants; he says it scattereth black choler, and is a renowned plant, which all antiquity so much used and admired: even the first discoverer of it, we are told by Pliny, had "black" in his name, *Melam-podius*, an old Greek Blackfoot. This gentleman was a Bucolic, and having observed that some mad goats of his eat hellebore, and walked staidly after, he gave it to two rather wildish daughters of a king in Arcadia, and sobered them for ever. It would be impossible to tell all the vagaries which this plant has

cured ; beginning with Hercules and coming down to dancing Dutch wives and Spanish grantees, performing undignified voltas. One celebrated physician administered it, he says, six hundred times without offence, and yet, though flattered as a "suave medicamentum, an easie" that may be given to weaklings, it is far better to be cautious of it; even in the hands of a mediciner it is of very uncertain effect, its degree of acidity being much altered by heat, dryness, and other casualties; and as a judicious writer remarks, "it is used by venturesome quacks in decoction and coarse powder, to kill worms in the belly, which it never faileth to do ; where it killeth not the patient it would certainly kill the worms, but the worst of it is, it will sometimes do both." The desperate hazard of such drugs being ignorantly employed is evident from this notice of its effects, even where administered in quantities not fatal : "with some it violently vomits and rendereth heart-sick even to swooning; and if through strength of nature they recover, some have lost their hair, and the nails from their fingers and toes, and the scarf-skin of the whole body has peeled off from head to foot thereby."

These sad circumstances are not pleasant records, but as we have here and there an "Herb-doctor" still, it is well to warn the public against those modern Culpeppers. From this plant being common in groves, children sometimes put it in their mouths. At first the taste is warm and a little biting, it then produces a cold numbness, a property common to other narcotic-acrid vegetable poisons ; the effect of having taken a portion of

the plant into the stomach by mistake, may be exhibited in all the stages from stupor and partial poisoning, to death. It is reputed of certain Italian drug-doctors, that they can poison, half-poison, quarter-poison, or give a deadly potion, which shall do their bidding in years to come. Poor Juliet, when provided with a means of temporary death, doubted for a while, she says,—

“What, if it be poison which the friar
Subtly has ministered, to have me dead.”

Shakspeare's description of this process records well the practice which many believe is often employed in various ways in our own time in Italy; and his account of what doctors would call the Diagnosis, or looking into the knowledge of Juliet's intended case, shows what narcotic poisoning in a mild degree may be. The friar's description is well known—

“Take thou this phial, being then in bed,
And this distilled liquor drink thou off,
When presently through all thy veins shall run
A cold and drowsy humour, which shall seize
Each vital spirit, for no pulse shall keep
His natural progress, but surcease to beat.
No warmth, no breath, shall testify thou liv'st;
The roses in thy lips and cheeks shall fail
To paly ashes, thy eyes' windows fall
Like death when he shuts up the day of life.
Each part deprived of supple government,
Shall stiff, and stark, and cold appear like death;
And in this borrow'd likeness of shrunk death,
Thou shalt remain for two and forty hours.”

The foetid hellebore or bear's-foot, so called from the shape of its leaves, has constantly been used by herbalists along with the green hellebore, and is like it, found in groves, but is not a native of Ireland. There is a period of the year, when

these plants are particularly dangerous to cattle ; that is, when other herbage is very scarce. Dr. Milne relates, that when the ground was covered with snow, a flock of sheep, finding nothing else green on the surface, ate plentifully of it, which killed many of them ; a few recovered, however, by getting an emetic of oil, which caused them to eject the "felon-grass,"—a proper warning name to denounce it by. To return to our own species ; the green hellebore flowers in April and May, and, as its usual residence indicates, will flourish under the shade of trees. In accidental poisoning with vegetable poisons, copious washings out of the stomach, by whatever means is most promptly accessible, is the surest hope for recovery, that is, when professional assistance is delayed.

Next comes *Aquilegia*, from "*aquila*" an eagle, and "*lego*," to gather or collect ; the spurs of the blossom-bells being incurved, in the manner that the eagle contracts its toes together to grasp, the addition "*vulgaris*,"* would indicate its frequent occurrence ; but in a state of nature it is a rare plant in Ireland, though common in gardens. Cultivators have recently produced some very beautiful varieties, which are quite a revival of position in favour of a flower that from sameness was getting old-fashioned. Our English name Columbine, from "*columba*" a dove, softens down the figurative resemblance of our subject from the eagle. If we separate one petal or bell from the flower-cluster, it brings with it two blossom-leaves, which are called sepals, and the combination

* *Vulgaris*, in Linnæan language, means well known, but not vulgar in the usual sense.

gives a floral dove, with sufficient accuracy for poetical imagination. Our beautiful popular phrase *gillum-bawn* in the Celtic, white dove in English, probably originates the more learned Latin word *Columbanus*. When found wild, this bloom is of the lightest blue colour, and shades of blue pervade in the tinting of our rock-pigeons, and some others of the *Columbideæ*. In gardens it is mostly double, and of a great variety of tints. Withering observes that the elongated and incurved nectary or honey-horn of this flower, seems to bid defiance to the entrance of the bee, in search of the hidden treasure ; but the admirable ingenuity of the sagacious insect is not to be thus defeated, for, on ascertaining the impracticability of effecting his usual admission, he penetrates both calyx and blossom near the depôt of honey, and thus extracts the latent sweets without further difficulty. Mr. Phillips notices in his "*Flora Historica*," that the Columbine has three distinct modes of doubling its flowers ; first, multiplication of the petals by conversion of the nectaries, next, by the increase of the nectaries to the exclusion of the petals, and also by the multiplication of nectaries, while the proper petals remain ; so various are the means by which beauty can be increased in this dove-plant. We have in Brown's "*British Pastorals*" a record that our plant was in former times the insignia of a deserted lover ; why ? except that a deprived dove seems to pine is not very evident, the poet says—

"The columbine by lonely wand'rer taken,
Is then ascribed to such as are forsaken."

The columbine flower in its wild bloom is of the

colour of the breast of the columba or ring-dove, a more or less purple blue; a shade which suits brilliant complexions, in ladies' dress, as we find in the following scrap of a very pretty old poem :

"The good Sir Topas
He had, as antique stories tell,
A daughter cleped Dowsabell,
A maiden faire and free.
And for she was her father's heire,
Full well conn'd was she in the leyre
And mickle courtesie.


"She ware a frock of frolic greene,
Might well beseme a mayden queene*
Which seemly was to see.
A hood to that, so neate and fine
In colour like the Columbine,
Wroughte full featously."

Extract from "Mickle Drayton."

The second natural order of our native plants presents us with but one genus and one species, the Barberry. The berry of this shrub is not "barbed," consequently we must find some other origin for its name. For want of a barbed berry, although its branches are very thorny, we are informed that the Arabic designation of it is berberys, in Latin made berberis, and in English barberry, by adopting the style of each language which it passes into. Bochart says the name is derived from the Phœnician word "*barrar*," the shining of a shell, which is given it from the lustrous gloss of the leaves in some of the species. It was formerly common in hedges, but has been industriously eradicated, in consequence of the notion that a fungus which appears on its leaves originates red-rust in wheat. Most of these

* Queen Elizabeth.

fungi, however, have their inhabitiveness strongly marked by their modes of residence ; they usually adopt some species of plants for their fixed home ; at times they range as widely as the extent of a genus, but to ramble from berberis to ceralia would be an exploit new in the history of fungoid excursions. As a general rule, though not universally strict, each creature has its own special parasite, a moss, lichen, fungus, or insect assailer, and does not need to borrow from its neighbours. We cannot, then, without good proof, believe that the red-rust of the Barberry infects wheat, but if we consider how important open dry air and the full action of the sun is to the healthy perfection of this chief festoon in Ceres' wreath, we can readily perceive why close high hedges around corn-fields can injure the vigour of the crops, and expose them to parasitic attacks. The Barberry is a common shrubby ornament, and in all stages of its growth it deserves selection ; its early vigorous shoots, its blossoms, its leaves, all recommend it. Its spines have a curious origin ; they are abortive leaves, the primary ones being converted into this well-known armature. In the flower is a most interesting instance of irritability. The stamens when the flowers first open are in a recumbent position, lying close-pressed back upon the petals. You may shake the flower, or touch the top of the stamens without producing any change, but if you touch one of the filaments near its origin with a pin, or for convenience with one of the thorns of the stem, the stamen springs up, and strikes its anther against the stigma, which then has depo-



sited on it the fertilizing powder, and this effect may be produced on each stamen in succession, until the whole group become bundled round the central column or stigma. It would be worthy of notice to ascertain whether this stimulation is indispensable; whether insects always have to do the duty of the pin, or whether the pollen when ripe is scattered independently of such agency. Dr. Lindley adds that if you dose the Barberry blossom with laudanum or any opiate, the stamens become stupified and lose their elasticity, and if you poison the plant with any substance, such as arsenic, which in animals produces inflammation, a sort of vegetable inflammation is the result. The learned professor concludes this subject by saying—"We are not, however, on that account to conclude that this plant approaches animals in nature, but merely, that the principle of life which pervades all animated nature is the same in its essence, and is affected in a similar manner by similar causes, whether it exist in an animal or in a vegetable." The fruit of the Barberry, when made into a conserve with sugar, gives that sapid flavour of a pleasant sour with sweet, which is agreeable to many palates.

There have been new species and improved varieties introduced, of which the fruit is larger and more succulent. The acid to which they owe their piquancy is the oxalic. The colour yellow pervades this plant in many of its structures, the blossom is of that tint. The wood is yellow; the yellow roots are bitter and astringent, and if boiled with a mordant will dye yellow; and again, the deep yellow-coloured inner bark was con-

sidered as a specific for the jaundice in the days when the doctrine of "the affections of colours" held sway. The leaves of the Barberry partake of the same pleasant acid with the fruit, which is so intense in the wild berry that birds will not eat it. We may conclude the description of a plant full of curious interest by saying, that a few blossoms are agreeable to smell, but too many are heavy and oppressive. Withering goes at great length into the elastic property of the stamens of this flower, and it is well worth while to read his remarks carefully. He gives additional facts, viz., that there is a small explosion at the bursting of the pollen-pod or anther; that the action of the sun through a burning-glass will produce the effect; that when the flowers are electrified and sparks drawn from them by the approach of a metallic body, the stamens immediately spring towards the pistil. Mr. Henfrey adds that the stamens which have touched the pistils slowly return to their former position. Whether fecundation takes place without exterior aid or not, there is a sufficient provision in this blossom to induce it artificially, if it may be so called, each petal has near its base two honey-bearing glands, and between every two of these glands a stamen is placed, so that when insects seek to extract the honey, they must touch the lower and irritable part of the filament. All these wonders have caused Withering to express his admiration in the language of the poet Cowley—

"If we could open and inbend our eye,
We all, like Moses, should espy,
Even in a bush, the radiant Deity."

CHAPTER IV.

THE WHITE WATER-LILY; HOW IT ILLUSTRATES MORPHOLOGY:
 ITS CULTURE: ITS SEED NARCOTIC-BITTER: THE SLEEP OF ITS
 FLOWERS.—YELLOW WATER-LILY.—THE POPPIES OR PAP-MAKING
 SEEDS.—HYBRID POPPY.—PRICKLY POPPY.—SMOOTH-HEADED
 POPPY.—TARQUIN AND JUNIUS BRUTUS; CUTTING OFF SLEEPY
 HEADS.—DIVINATION BY POPPIES.—RED POPPY.—OIL OF POP-
 PIES.—OPIUM PRODUCING POPPY.—DIACODIUM.—POPPY SEEDS
 EATABLE.—OPIUM AND OPIUM EATING.—NEPENTHE AND OTHER
 “BREWED ENCHANTMENTS.”

WELCOME to the White Water-lily. Queen of our
 native naiads, well named

“The fairest of the naiad throng.”

See how she bathes her limbs in bright streams,
 and expands her brownish-green and full green
 drapery, partly laid in broad plaits, while some
 leaves are flat and smoothly shining on the
 ripply waters. This plant has no proper stem;
 the succulent leaf-stalks rise stoutly from the
 root, and sustain their shield-formed leaves up to
 the light and air. In June and July the white
 stars of the *Nymphæa alba* appear; sometimes
 the blossom-leaves seem slightly tinted within
 with rose-colour, which, with the white succu-
 lency of their structure, gives them almost the
 tone of flesh to a painter's eye: thus imagination
 may people the silent lakes, and see

“The streams send up bright shapes,
 That, from their lily hair,
 Wring out the sparkling waters.”

The yellow clustering stamens within the snowy cup give richness to the flower, while its almond-like odour adds to its abundant attractions. The flower of the White Water-lily is one of the most illustrative exhibitions of the modern doctrine of the morphology of plants. This principle is explained by the derivation of the word from the Greek "*morphos*," to invest with a form. The statement was recently a theory, but is now generally received as a fact, that all the organs of plants are modifications of leaves.

We commence in this case with the outside floral envelope of the *Nymphæa alba*, and we find it of a greenish colour like a leaf, but applied to the purpose of a calyx; a whorl of petals come next, in which the green tint disappears; within this group appear smaller petals, showing rudiments of anthers at their points, and this character increases, while the petal-like structure grows less, until the innermost bundle shows perfect anthers, with the diminished petals changed to flat and narrow filaments. The announcement of this physiological law drew from the able and witty Bishop Whately a comparison, in which he said that all fire-irons were but a poker modified, the tongs being a poker with a limb produced, and a shovel a poker with its terminal end expanded. So much for archiepiscopal morphography. The flower stems are porous, with small tubes like bamboo stalks, and they transpire their moisture so rapidly, that even water at the lower part of them will not, when picked, prevent them from withering and becoming flaccid. To keep the flower

open any time it should touch the water, and show itself, as Darwin says—

“As nymphs emerging leave their sparkling streams.”

The Water-lily may be transplanted from its wild home into aquatic gardens, by placing its thick prostrate stems in a basket, covering them in earth, and fastening the basket with stones where it will be well submerged. It may be remarked that these stems have a bitterish astringent taste, and used to be formerly employed for dyeing grey and brown; their astringent quality recommended them also as a medical tonic; they probably contain tannin and gallic acid. Let us now notice the object for which

“The water-lily to the light
Her chalice rears of silver bright.”

It is to perfect the pollen, and scatter it on the stigma; the light stimulates this process, and besides, if it was performed beneath the water, the fertilizing dust would be washed away; this function perfected, the seed-vessels retract, and ripen their seeds within more or less watery submersion. The seeds are numerous, and have an opium-like bitterness, which some people enjoy. I have seen them eaten, but, like the taste for most narcotic bitters, the *haut-gout* is not natural, and must be cultivated. The greater number of the flowers of *Nymphæa alba* raise themselves, and expand their snowy stars on the water as the sun gains strength, that is by about seven o'clock on brilliant Summer mornings. They close again in the evening, commencing to retire about

five o'clock, according to their degree of exposure to light; and so they sleep through the hours of darkness, when a few blossoms, which seem to have lost their sensibility, remain over-blown, while others do not re-open with the morning ray. These seem to be the flowers whose impregnation being complete do not require to guard their stamens any longer. Moore beautifully verifies this process :—

“Those virgin lilies all the night
Bathing their beauties in the lake,
That they may rise more fresh and bright
When their beloved sun's awake.”

Herrick, the very sweet old English poet, wrote an address to nymphs drinking at a fountain; and he solicits a draught from them, in which he notices the water-queen's beauty of colour as being surpassed by the ladies he apostrophises:—

“Reach with your whiter hands to me
Some crystal of the spring,
And I about the cup shall see
Fresh lilies flourishing.”

We may add, that the purity in the unspotted beauty of the *Nymphæa alba*, and the cool bed of water where she reposes, or beneath which she sometimes retires, has given to her, in olden times, the sentimental attribute of inducing that chastity of which this vestal flower is so pleasingly emblematical. But all our naiads are not snowy-white, and we come now to a yellow nymph, *Nuphar lutea*. This name was used by Dioscorides, and is, probably, the Arabic name, “*Noufar*.” The Yellow Water-lily is common in

slow streams and ponds ; in July it opens its cup-shaped blossom, richly gilt inside, but with the outside of its large and thick sepals, or outside blossom-leaves, green ; the petals or interior blossom-leaves are numerous, but small ; and the thick club-headed stigma in the middle of the yellow stamens is an imposing part of the flower. The blossom has a smell which, when strong, somewhat resembles ardent spirits, and is too oppressive for most persons' taste ; in a less amount the odour is not disagreeable, being then rather like that of almonds.

It is interesting to observe how refined habits educate even the senses. We find in less polished times that strong coarse odours were much liked by a class of the community who now would be nauseated by them. Certainly, the sentiment conveyed by the name "Brandy-bottles," which this flower got in olden time from its smell, is very repulsive ; and I regret to make any unpleasant association with our flower, except for the just purpose of showing that education has a large range of application, when even our senses can have their wants modified and refined by moral training. The leaf-stalks contain a considerable quantity of starch, as do also the seeds. Some persons boil the seeds, when they are said to have a pleasant nutty flavour. The leaves have been used as a styptic. Linnæus says swine are fond of them and of the prostrate stems ; goats, sheep, cows, and horses refuse them. These prostrate stems, rubbed with milk, are a reputed poison for crickets and cockroaches ; also the smoke of them when burning is fatal to these

domestic pests. The whole herb has been employed in tanning. The infusion of the part formerly known as the root in water, was long considered a specific in eruptive complaints. The Greeks use the flowers in making a cordial.

We found in our white lily a water queen, in all her delicacy of beauty, softness, and sweetness; we must make this yellow-coloured chief-tain her king—he is all a warrior,

“In golden armour, glorious to behold,
The rivets of his arms are nail’d with gold.”

Finally, mark the interesting provision to preserve a free aeration to the juices of the nymphæa. Mr. Henfrey states the fact, that in air-growing leaves the upper faces have generally a thicker cuticle, and are either devoid of, or slightly supplied with, stomates or breathing spiracles. The under surface possessing this facility copiously, rain does not embarrass the aeration of the plant through the leaves; but now for our floating water-lily: the under surfaces of her leaves are covered with the fluid on which they float, consequently the pierced epidermis is placed uppermost and in contact with the air; but from its shining surface and slightly rounded line of form, water, rain, or dew does not remain on it to hinder the vegetative respiration.

The fourth order of native plants consists of the Papaveraceæ, so called from the Celtic word “*papa*,” the soft food given to infants, and abbreviated into *pap*, in which the seeds of the poppy were boiled to cause sleep. The change of the vowel “*a*” into “*o*” is not uncommon; “*papa*”

is altered into "*pope*" in our common language; and "*pappa*" is thus corrupted into "*poppy*." Swift softens the hard word "*pap*," in his "*Baby Lyric*," "*pappy in the saucepan*," and shows its sleep-producing quality in his well-known chorus, "*Niddy-noddy, niddy-noddy*."

The first Irish species in this group is the Hybrid Poppy. It is a true species, not double-bred, and I cannot discover the origin of this specific name. It perfects all its seeds, while flowers, which are the results of mixed species, are usually more or less imperfect in their seed-forming; yet it must have been once thought to have been double-bred, because it was popularly called "*Mongrel poppy*." Its most obvious character is contained in its common name, "*Round rough-headed poppy*." The stem is leafy, and the leaves are much subdivided. It is rather a rare Irish plant; is to be looked for in sandy fields, and shows its red crumpled petals in June; the anthers are, in accordance with Withering's description, "*of a pleasing blue*;" the pollen gives them also that colour, as related by some authors,—this statement requires proof. The capsules are bristly, and the seeds escape under the radiated lid which covers the seed-box; they can be dusted out, as if from a natural pepper caster.

The seeds have a pleasant, nut-like taste; they may have been a good addition to children's food when boiled; because of their mild oily contents, but in them there is nothing soporific; if a somnific effect was ever produced by them, it must be from bits of the capsules being boiled with them, otherwise it could be only the emollient

and soothing effect of water only find their indicated place in infants, for which it has such reputation that I am almost sure of its efficacy as "*Tranquilisium*." The use of these plants in producing sleep is of the greatest antiquity, and the modes of its application were various. Virgil tells us that the very water which dripped from the leaves was sufficient. He says —

"And poppy shedding slumberous down around!"

The united heads of the poppies were applied as suckers in cases of pain, and with good result; but whether as weak as infusion of opium acted from the narcotic effect, or because it was a warm drug, remains for proof; the applications being usually made to the feet and legs, unless the latter explanation must prevail.

The next species is the long-headed pretty poppy, or, according to science, "*Argemone*," from "*argemon*," a disease of the tissues of the eye, for which the infusion of this plant was considered to be a cure; and, probably, its emollient power did away inflammation. It appears as greyish or sandy white, in dome, with the red blossoms, which are so transient that the seeds usually fall off within six hours; sometimes it is found semi-double, and then the blossoms last longer. Blossoms being the argument which guided the preparation, by seeds of flowers bearing plants, when the pollen is distinguished in the stigma, their duty is over, and they fall off. Double, or semi-double flowers, not having the means for the discharge of this function, the blossoms seem to delay for a process which, as

it does not occur, at length they tire and fall, like deciduous leaves, not connected with the fructification of the plant at all. The blue stamens are a pleasing combination with the red petals and deeply-cut green leaves of our flower.

We have now the long Smooth-headed Poppy ; its Latin specific name is "*dubium*," so called from the general resemblance of four of the species, which to superficial observers must cause *doubt* about their distinctions. This plant, with its scarlet leaves and yellow stamens, is not rare in corn-fields and sandy places in June. The bristles are closely pressed to the stalk, which distinguishes it very clearly from the common red poppy, whose bristles stand erect, and with which it is most likely to be confounded.

Among the various uses to which poppy heads have been applied, we have an ancient story worth remembering :—

Tarquin the Proud was ordered by an oracle to offer heads to the Lares or household gods ; he sacrificed human victims to them ; but Junius Brutus, after the expulsion of the Tarquins, obeyed the letter of the oracle in a milder spirit, and substituted poppy heads as the victims.

Theocritus tells us that the red poppy was used formerly for making love prognostics ; but it must have been sleepy work, not fitted for our go-a-head times. The mode of this divination is told thus :—

" By a prophetic poppy leaf I found
Your changed affection ; for it gave no sound,
Though in my hand struck hollow as it lay,
But quickly withered, like your love, away."

There are a whole series of curious operations to be noticed in the fructification of the poppy. Paley observes that, while growing, the head hangs down, a rigid curvature in the upper part of the stem giving it that position, in which rain and moisture quickly run off it; but when it has attained its full size, and is ready to open, it erects itself, and presents its flower to the genial influence of the sun's rays. It may be added, that when the petals first fall off, the seed-vessel which rises in the centre is completely closed; but as the seeds ripen, the sides of the capsule shrink, while the radiate lid remains of its first size; this causes an opening under the cover, which lets in dry air, and also forms an aperture for the ripe seeds to be shaken out through by the wind, or the falling of the seed-vessels.

Of the common Red Poppy, the *Papavar Rhœas*, rose-like poppy, Loudon says, that this specific name is derived from "*reo*," to fall, or flow, in Greek, in allusion to its fugacious flowers; but there is a more probable origin of the appellation;—if the skin be broken, there flows from it a red-dish juice. This dazzling ornament of corn fields is abundant to excess in many parts of Ireland; less so in Munster, however, than in Leinster; but the changing of the seed of corn to different parts of the country will soon distribute the corn-weeds universally. Its blossoms make a gorgeous show in July, with its intense red petals and purple stamens. It would be now considered a vulgar flower in bouquets, but in early days full colour was prized in ornament. Virgil gives an invitation thus:—

"O, come! The nymphs for thee in baskets bring
 Their lilled stores; for thee, the blooming spring
 The white-arm'd naiad rifles; violets pale,
 The poppies flush, and dill, which scents the gale."

The flower which is so justly admired in gardens, under the name of the French Poppy, is a double variety of this species; it sports into a great number of colours, from its original red, even to a purple, and almost black. With this sombre plant we may make a home for Somnus himself, the drowsy son of Erebus and Nox. The central palish petals of our double flower may be his downy bed, where he reposes, and the outside darker and larger leaves shall be his black curtains, making thick airs and sleepy thoughts about him :—

"A listless climate,
 Was nought around but images of rest,
 Sleep-soothing groves, and quiet lawns between,
 And flowery beds that slumberous influence preste,
 From poppies breath'd, and beds of pleasant green."

And yet the glowing corn-rose was formerly considered an emblem of joyousness, from the brightness of its petals; these gorgeous flower-leaves the *Apis papaveris*, or drapery bee, chooses for hangings for her apartments. This insect (which is not known to inhabit our country) dexterously cuts out the petals of the half-expanded flowers, straightens the folds, and then hangs the walls of her cell with this splendid tapestry.

The uses of this poppy are similar to those of the other species; the petals have, when made into infusion, a slight opiate power, all parts of the plant except the seeds being

"Pregnant with Lethean juice."

They yield a fine red colour, and used to be made into a soothing syrup ; but syrup of poppies has given way to the more direct use of opium. Oil of poppies has been drawn from these seeds, of which Linnæus says 30,000 have been found in one head. The oil is sweet. Gerarde records that in his day it was considered pleasant and delightful to be eaten ; it is, however, chiefly procured from the large white poppy. A curious account of violent controversies respecting the wholesomeness of this oil will be found in the *Library of Entertaining Knowledge*, in the volume called "Material of Manufactures ;" but it is too long to quote here. In classic lore, we find that the poppy was sacred to Ceres, the well-known goddess of rural productions. It might be that this plant was devoted as a victim to the parent of agriculture, because it was a troublesome weed in corn ; but from its being held in the hand of the goddess along with ears of wheat, and also worn as a wreath in her Egyptian character as Isis, it is more probable that it was propitiatory, and also indicative of its value as an oil-producing plant ; her worship in thankfulness was held—

" As tempered suns arise,
Sweet beamed, and shedding through the lucid clouds
A pleasing calm : white, broad, and brown below,
Extensive harvests hang the heavy head.
Rich, silent, deep, they stand : for, not a gale
Rolls its light billows o'er the bending plain :
A calm of plenty ; till the ruffled air
Falls from its poise, and gives the breeze to blow :
Rent is the fleecy mantle of the sky,
And back, by fits, the shadows sweep along
A gaily chequer'd, heart-expanding view,
Far as the circling eye can shoot around,
Unbounded, tossing in a flood of corn."

We now come to the *Papaver somniferum*, by eminence above all its congeners, the Sleep-producing Poppy. It is a very handsome plant in all stages of its growth; the leaves are smooth, and clasp the stalk, for a considerable way, in their sea-green drapery. A bed of the common white poppy in full blow is indeed a magnificent show, and well worth placing in a spare corner of gardens, for the exhibition it makes in July. This plant sports in colour, from its handsomest appearance, which is the snowy white, into various shades of pink and purple, and then appears in our gardens as a robust, rather coarse, shrubby annual. As is the case throughout the order, every part of this plant, the seeds excepted, abounds with a white milky juice, which has a heavy, nauseous smell, well known as the narcotic odour. It would take a large book to give a full account of the production, uses, and abuses of opium; consequently, we must abbreviate very strictly. The mildest form in which opium has been given is as syrup of poppy-heads. "*Diacodium*," the divine, or excellent poppy-juice—"dia," of the gods, and "*koademos*," madness or stupefaction, that which can inflict these calamities potentially, and unfortunately quite as much in modern times as old ones. The Celtic origin of the word is "*paipeu*," or "*baibeu*," an infant; and its services have been dedicated mischievously even at the very threshold of human life; children, when suffering internally or externally, from uneasiness or pain, will cry—and this, to an indolent mother, or a careless nurse, is very provoking; a nursery, by such nurturers, is sought

to be made in accordance with Thompson's description of listless ease, viz. :—

"A pleasing place of drowsy-head it was,
Of dreams that wave before the half-shut eye;
And of gay castles in the clouds that pass,
For ever flashing round a Summer sky.
There eke the soft delights, that witchingly
Instil a wanton sweetness through the breast;
And the calm pleasures always hover'd nigh;
But whatever smack'd of 'noyance or unrest,
Was far, far off expelled from this delicious nest."

It must have been delightful to a deputy-mother, in mediæval times, to be able to give a busy bantling a syrupy dose which would put it to sleep, even with strings too tightly bound on it; or a pin sticking *a little way* into its back, the dear; and as to injuring its stomach by these frequent slight poisonings, pooh! that was too learned to be believed in.

Mr. Alexander Forsyth, of Devon, the eminent horticulturist, has lately, in the *Gardener's Magazine*, re-called attention to the utility of poppy seeds as food.

Poppy-seeds-seasoning, a queer cure, we read of: Sterne, in a letter from Montpellier, dated Feb. 1, 1764, writes as follows:—

"P.S. My physicians have almost poisoned me with what they call 'bouillons rafraichissants'—'tis a cock flayed alive, and boiled with poppy seeds, then pounded in a mortar, and passed through a sieve. There is to be one crawfish in it, and I was gravely told it must be a male one—a female would do me more hurt than good."

So much for French simples; and although nearly a century has elapsed since these doctrines

were in their glory, they have still their advocates.

While treating of the capsule of the poppy, let us notice that the seeds make excellent food for cage-birds. It is well known that opium is derived from this plant by slitting the seed-vessel before it is ripe, and saving the milky exudation, which is afterwards evaporated to dryness. It is said that so strong is the poisonous effect of this plant, that persons employed in saving the extract suffer much injury even from its exhalation; and, further, that walking for some time between rows of poppies gives a disagreeable general perception of narcotism, which

“Sends forth a sleepy horror through the blood.”

Attempts have been made to manufacture opium in England, but its profitable culture must depend on that fast-decaying support—protecting duties. The details of this culture and preparation are to be found in most accounts of the drug. The active chemical principle of opium is morphia; for its more minute history readers are referred to chemical and pharmaceutical works. Dr. Macnish, in his *Anatomy of Drunkenness*, gives a history of opium well worth attending to. He says it aggravates whatever passion predominates at the time of its use, whether it be love, hatred, benevolence, or revenge. Lord Kames tells of fanatical faquirs who, in paroxysms produced by opium, committed frightful butcheries—one man of them having murdered seventeen Dutch sailors in a very short space of time. The brutal ferocity of the Malays, when infuriated by opium drunk-

eness, is well known under the name of "running a muck." It is certain that the excitement of opium is, at first, highly pleasurable to most opium eaters; but the fearful accounts of its depraving results on both body and mind, ought to cause those who believe that their powers were given them for nobler purposes than for sensual debauchery, to avoid a criminal temporary enjoyment. At no great distance of time from his initiation the opium eater has to keep himself perpetually drunk to avoid the horrors of casual sobriety; but even more immediately the evil is felt; for, although wild ecstasies attend its drunkenness, it is well known that the gloomy agonies of recovery are fearful. It is related in mythology that some prepared and flavoured infusion of opium was what the gods debauched themselves with—

"There each deep draughts, as deep he thirsted, drew;
It was a fountain of nepenthe rare,
Whence, as Dan Homer sings, huge pleasance grew,
And sweet oblivion of all earthly care,
Fair glorious waking thoughts, and gorgeous dreams
more fair."

The Asiatic and African pharmaciens have always had a reputation for skill in their administration to inordinate sensuality. Travellers of all ages, and historians in prose and verse, have agreed in this testimony. Milton alludes to such potations in *Comus*, thus—

"And first behold this cordial julap here,
That flames and dances in the crystal bounds,
With spirits of balm and fragrant syrups mixed—
Not that nepenthes, which the wife of Phoebe,
In Egypt, gave to Jove-born Helena,
Is of such power to stir up joy as this."

It is stated of the Easterns, that their brewers and distillers in the opium trade can compound electuaries and potions calculated to produce all kinds and degrees of intoxication—beginning with frivolous and inane merriment, and varying into sottish repose, idiotic voluptuousness, or a frantic excitement bordering on incurable madness. One of these poisonous pastes is called “hatchis”; and, like our wines, it has purchasers among luxurious sensualists, who pay enormous prices for it if it bears the name of some notable compounder. Meaner computations take the places of our whiskey, gin, and porter, in the Eastern taverns, where men can, for a very small sum, destroy both body and mind for the sake of a depraved insanity.

In a popular work, “*The Memoirs of the English Opium Eater*,” is a vividly painful account of the fascination which draws victims into habits of confirmed indulgence in opium-intoxication; the terrible results which are the consequence are also effectively described; the construction of the story is called romance, but the sad facts it relates are consistent with truth, for the agonizing sufferings of the opium-drunkard cannot be over-painted. The passive pleasurable, and languishing enjoyment; the excitements of fancy, and vehemence of an unreal but imagined tonic of body; the ambiency of the whole frame, and the extravagant feelings of temporary power—all give way to a frightful anxiety, introducing phantoms of horror and disgust. The imagination, still exalted, takes a gloomy aspect, and, from those visions of Elysian character, a tan-

gible hell crawls up before the victim. Not reason, observation, nor comparison, will subdue the morbid romance; it is in vain to handle surrounding subjects, or to stare with tortured wakefulness in anxious desire to correct this nightmare, and banish these most terrible forms. It is the distracted nerves which are furiously disordered, and now they chastise the sufferer unrelentingly. Sleep is abolished; maddening wakefulness and frightful day-dreams seize the mind; peevishness is uncontrollable, except when imbecile rage absorbs it. Nausea comes on; vertigo whirls the Ixion of the hour; and at length the wearied and debased creature falls, body and mind, into a cadaverous collapse, to await his slow and painful recovery.

It is well known that opium eaters are very subject, also, to sudden death, and no wonder—persons who exhaust the nervous energy by such intense excitements and revulsions, may well fear that its power shall be suddenly interrupted: because all continuous vehement operations which stimulate to excess the springs of organic life, must be dangerous to its ordinary endurance. But these are only the physical consequences of the induced madness called intoxication—the intellectual and moral devastation it makes it is needless to dilate on; it is not from ignorance of the villainy which the drunkard commits against himself that the crime continues so widely mischievous, but because the brute often overcomes the man. Oh, then for a courage like that of the lady in Milton's "Comus;" let the tempted cry aloud, and make that cry a vow,

“Mercy guard me !
Hence with thy brew’d enchantments, foul deceiver ;
Hast thou betrayed my credulous innocence
With vizard’d falsehood and base forgery,
And would’st thou seek again to trap me here
With liquorish baits fit to ensnare a brute !
Were it a draught for Juno when she banquets,
I would not taste thy treasonous offer : none
But such as are good men can give good things ;
And that which is not good is not delicious
To a well-govern’d and wise appetite.”

Here is well depicted a woman’s courageous cautiousness ; refinement in manners, and correctness in morals rise together for her preservation ; and in the growing reformation to sobriety, women, in practice as well as in poetry, have taken the lead. We are horrified now at the idea of a “drunken lady.” May our repugnance be quickly extended to such beastliness and degradation in any one. Many persons who drink intoxicating potions would scorn the childish indulgence of excess in some palatable syrup ; but is it more dignified to take inebriating compounds to induce excitement and drunken sensuality ? Opium and its compounds have no recommendations for the palate ; they are intensely bitter. Consequently their attractions must be confined to their inebriating effects, for the value of their “brew’d enchantments.” Slaves to their seductions will swallow them, inducing fierce frenzy, to be succeeded by misery and imbecility. Oh, let the wise have a good courage and despise every drunkenness-making drug ; keeping the taste, the feelings, and the judgment, ready for purer, more refined, and more elevated enjoyments.

CHAPTER V.

WELSH POPPY: HOW IT OPENS: ITS BLOSSOMS ARE EVANESCENT.—YELLOW-HORNED POPPY.—OVID'S STORY OF GLAUCUS.—DANGERS IN GETTING THIS FLOWER OUT OF OOZY GROUND.—GREAT CELANDINE; A CURE FOR WEAK EYES.—FUMITORY: THE SMOKE OF THE EARTH: SPECIES: THE CAPREOLATA, OR CLAMBERING; THE FUMITORY OF THE SHOPS AND THE SMALL FUMITORY.

MECONOPSIS is the generic name given to the next division of the Poppy-worts; the Greek construction is, "*mukon*," a poppy, and "*opsis*," a resemblance, because it has several of the characteristics of the other poppies. Its specific name is "*cambrica*," *i. e.*, belonging to Wales, where the plant has been plentifully found. It might be thought that this name originated in its delicate cambric-like petals, and they would deserve the distinction well. If, indeed, the dropped vowel, "*i*," was restored to its place, the word would be *cambrica*, and its meaning would be more limited and obvious.

The Welsh poppy is easily distinguished from its relations, though its pedigree is pure; it is no upstart annual, and its perennial existence puts it, heraldically, in a rank with the aborigines of the Principality—that region of family descents.

"If it be true, as Welshmen say,
Honour depends on pedigree,
Then, stand by—clear the way—
Retire, ye sons of haughty power;
And you, ye spawn of old Glendower,
Come, let me have fair play."

It is a rare plant in Ireland, and in the county of Cork has been found only by one botanist, a lady, Miss Ball, who has made most valuable additions to our natural history. Its yellow flowers are handsome, and it is worth introducing into shrubberies; in the parterre it would be rivalled too successfully by *Eschscholzia*, which is neater, and equally showy. It blows in June.

The rapidity with which the poppies open their blossoms is a highly interesting subject for observation. Withering notices it nearly thus: The entomologist makes the birth of the butterfly, and her rapid development to perfection, a phenomenon of pleasing surprise; we may add a similar birth in the floral world, and show the poppy flower springing into her winged life in a minute. She lies concealed and singularly folded in her sea-green mantle, until her maturity arrives. Then the warm sun invigorates her energies, she bursts through her coverings, and with some force casts her rejected mantle from her; her silken drapery loses its wrinkled folds, spreads its beauty in the light, and we wonder how so small a cell could have confined so fully and richly costumed an inhabitant. The fragile evanescence of the full-blown poppy is well described in one of Burn's beautiful and natural allegories, viz. :—

“As bees fly home with loads of treasure,
The minutes wing'd their way with pleasure,
But pleasures are like poppies spread, ~
You seize the flow'r, its bloom is shed;
Or like the snow-falls on the river,
A moment white—then sinks for ever;

Or like the borealis race,
That flit e'er you can point their place ;
Or like the rainbow's lovely form
Vanishing amid the storm."

The yellow horned-poppy is the *Glaucium luteum*, so called from its sea-green stalk and leaves, and its showy yellow blossom. Its stem contains a yellow milky juice, which has the poisonous qualities of the milk of other poppies. The pods are narrow, and being from six to ten inches long, they are a very remarkable feature in the plant ; curved, like horns, they give it the name of horned-poppy.

When the botanist visits the sea-shore to make a prisoner of Glaucus, his history ought to be remembered : he was a son of Neptune, and of Nais, an ocean nymph ; but he resided, as a sailor would say, in-shore ; his nature, however, had some control on his habits, and he was fond of fishing. So, one day, he laid some of his prey in sea-grass, on the strand, the animals nibbled it, and got such vigour from their native food, as to be able, in spite of the exhaustion from having been netted, to leap into the sea. Glaucus, amazed at this exploit, was curious to test the invigorating power of the dilisk, he eat some, and his father's and mother's aquatic propensities seized him ; he boldly leaped into the sea ; and for his faith and courage, he was received a denizen among the sea-gods. In their territory he still shows his royal descent by wearing a golden robe, and yet, from old affection, high above it, he still bears his long and curved fishing-rod, with its point bent, as if a captive fish ever

strained it. Ovid makes Glaucus tell his story thus :—

“As o’er the deep I rode,
New to the seas, and late received a god :
And I myself but late a mortal was ;
E’en then, in sea, and seas alone, I joy’d ;
The seas my hours and all my cares employ’d.
In meshes, now, the twinkling prey I drew,
Now skilfully the slender line I threw,
And silent sat the moving float to view.
Not far from shore there lies a verdant mead,
With herbage half, and half with water, spread ;
My scaly prize in order all display’d,
By number, on the green sward there I laid ;
Strange to behold ! yet, what avails a lie !
I saw them bite the grass as I sat by ;
Then, sudden, darting o’er the verdant plain,
They spread their fins as in their native main :
I paused, with wonder struck, while all my prey
Left their new master, and regain’d the sea.
Amaz’d within my secret self, I sought
What god, what herb, the miracle had wrought ;
But sure no herbs have pow’r like this, I cried ;
And straight I pluck’d some neighb’ring herbs and tried ;
Scarce had I bit, and prov’d the wondrous taste,
When strong convulsions shook my troubled breast ;
I felt my heart grow fond of something strange,
And my whole nature lab’ring with a change ;
Restless I grew, and every place forsook,
And still upon the seas I bent my look ;
Farewell for ever ! farewell, land ! I said,
And plung’d amidst the waves my sinking head.
The gentle powers, who that low empire keep,
Received me as a brother of the deep.”

It will be remarked that this Glaucus was amphibious, he inhabited both land and sea ; Scylla, whom he loved, was turned into a rock on the shore, with howling waves around her ; this Prince Triton, therefore, never goes far to sea, but inhabits salt sands, marine cliffs, and places where the earth and ocean border each other.


It should be remembered that where fresh-water streams discharge themselves into the sea, there is generally a miry deposit, which is very dangerous ; and though it is sometimes covered with a firm-looking coat of sea-sand, this is deceitful, and only hides "the slimy bottom of the deep." Let those, then, who would capture this attractive oceanid beware of the accident which occurred once to a botanist who was engaged in this pursuit. In Dungarven there is "a meeting of the waters ;" where,

"Upon the beach a winding bay there lies."

In his season the horned-poppy bloomed, in great glory, on the sandy margin of the tide ; and our collector dashed at his gay prize quite delighted, when suddenly the smooth sand proved treacherous ; first his feet and then his legs sunk through the yielding surface, which, though plashy and fluid, was not water in which a swimmer could progress. It was almost night-fall, and no help was near the solitary shore ; the vision of Clarence's shipwreck seemed his fate ; and he had to contemplate

"What pain it was to drown
What dreadful noise of waters in his ears,
What sights of ugly death within his eyes."

The beleagured botanist saw quickly that he had a choice of dangers before him ; if he scrambled towards the land he would be more deeply engulfed in the unsupporting mire ; if he rushed backward he had a deep and craggy fall to hazard, and with his clothes on, too, into the sea.



He felt himself sinking, but his "sore agony" supplied invention—he flung himself quickly at full length, and extending his arms, rolled himself over and over into the more hardened sand, and thence drew himself into the deeper water, which was also the safer part of the shore, where he dared to raise himself again, and to be deeply grateful for his wonderful extrication.

In concluding this sketch of the poppy group of plants, we would repeat again, and earnestly, let those who desire a sound mind in a sound body, abjure narcotics. No doubt opium in small doses, gives a transient increase of energy to mind and body. It quickens the pulse, and sets imagination on an unsteady velocipede; but it is at a fearful expense that these pleasures are gained. The corporeal frame is heated, a burning thirst is excited, which parches the mouth, and dries up the fevered salivary glands; it diminishes, to a most injurious extent, all the secretions and excretions, those of the skin excepted, which last are unnaturally and distressingly increased, and a sense of sinking languor and lassitude follows, with a frightful fear of idiotic imbecility of mind supervening, which is but little alleviated by the occasional exacerbations of a querulous and contemptibly impotent frenzy.

The next genus of our native plants is called *Chelidonium*, from the Greek word "*kelidon*," a swallow; "because," says an old writer, "it beginneth to spring and flower at the coming of the swallows, and withers at their return;" but more, Pliny writeth that it was first found out by swallows, and hath healed the eyes, and re-

stored sight to their young ones that have had harm in their eyes, or have been blind ; but ornithology has failed to supply any origin for this story. Most popular names of plants have some discoverable foundation, even though fancy may have exaggerated it ; this, however, is a failure. No one has observed the swallow using the swallow-wort either as food, as physic, or as an eschariotic to remove any film from his eyes. To be sure, as in one of those sun-birds, who live in brightness, the nictitating membrane, or eye-sheath, may be thicker and more developed than in others, as we know that of the eagle to be ; but what ancient observer is there who has seen the swallow's eye covered with its natural film, and by error has pronounced the caustic of the *Chelidonium* as its proper surgery ? When sick and enfeebled, the sustaining muscles of that curious semi-transparent duplex eye-lid loose their tension, and it extends itself upon the eye ; but this happens to most birds when they are feeble, or dying, and is not peculiar to the swallow. Again, mythology, our frequent resource, almost fails us here ; we have certainly poor Progne metamorphised into a swallow :

“ Around the smoky roof she ever flies.”

And Ovid tells us that, from her injuries,

“ In Progne's breast the rising passions boil
And burst in anger.”

Hers was a most cruelly provoked jealousy, and quite intense enough to freeze her blood “ to jaundiced bile, and arid yellow drops,” such as is that

of the swallow-wort ; but the poetical application is still very imperfect, so we pass on to prosaic facts.

The acrimonious yellow, or orange milk of this plant, will, like other such vegetable exudations, destroy the vitality of warts, and was formerly much employed as a general eschariotic. Thus, returning to its use about the eyes, I have seen its juice applied with honey to remove films ; but it is to be feared that there was as much damage done by irritating the eye-lids with this virulent compound, as there could be good done in removing the cloud from the eye-balls. When evaporated, this milky emulsion deposits a kind of gum-resin. The plant is now nearly banished from tasteful gardens, and from the herbary it is disappearing. It has wandered from these favoured homes into waste places, near villages, but is well known still among herb-women and herb-gatherers (who are usually *men* in England), as Great Celandine, the English form of *Chelidonium majus*. Its juice may be applied as a fly poison, which is less dangerous about apartments than some which are in general use. The old alchemic doctors held that it was good to "superstifle the jaundice," because of its intense yellow-orange colour.

We now enter on the fifth order of our native plants, the *Fumitory* family, or Fume-worts, and our first subject has been separated as the genus "*Corydalis*," a Greek word, meaning a lark, because there is a spur at the base of the corolla, which being somewhat extended from it, like the hinder toe of a lark, is a remarkable object.

This plant usually chooses a sylvan retirement, clambering through lowly hedges, in rocky wildernesses, and on scrubby sands. It is very shy of letting its retirement be known; and yet it has, from its peeping curiosity, peered over the tops of thatched cabins, and often strays with caution, clinging to the dangerous ruins of ancient castles and abbeys. It is called *claviculata*, because the leaf-stalks terminate in a tendril, which, from its windings, is compared to a key, although its wreathings are more intricate and various than those of the best patent lock, and also are limited to the one purpose of making fast, and binding this delicate plant to whatever it can clasp; but the *clavicle* does not let go—like some ancient magic key, it can do, but not undo—consequently we will derive it from *clavi*, a claw or clamp. The slight stalk of this inconspicuous twiner is reddish, and the leaflets (three on each foot-stalk) are pale green; the blossoms are of a faint yellow and tubular—they appear in June. Its present English name is White Climbing Corydalis. In early Spring, sings Thompson:—

“The lenient air
Delicious breathes: the penetrative sun,
His force deep-darting to the dark retreat
Of vegetation, sets the steaming power
At large, to wander o’er the verdant earth
In various hues, but chiefly the gay green!
United light and shade! where the sight dwells
With growing strength, and ever new delight.”

Now, at this exuberant season, when the early riser walks in the newly ploughed and harrowed field, or in the paths of richer garden ground,

the Fumitory will be found rising through the recently dug earth, and so suddenly, that it seems to emanate, attracted by the influence of the sun and moisture, along with the visible transpiring of earth-born

“Vapour, and mist, and exhalation hot.”

But this smoke of the earth has a truer cause for its designation; if pulled up, the stalk near the root, and the root when crushed in the operation, smell very strongly of smoke. This name, so happily applied, shows the attention of the old observers, to whom we are indebted for many popular designations, without which facts of this kind might often escape superficial notice. The general herbage of the plant has not this fume, it is when the mass of stalk is broken near the root, that the smell is strongest, and is perceived very distinctly. Our first species in this genus is the *capreolata*; so called from its clambering habit, and wild untrained vigour of growth, which are likened to the characteristics of a goat, the Latin name of that animal being our English word, “caper,” and conveys accurately the idea here intended. It is also called ramping fumitory, because of the rampant robustness, and wild diffuse vegetation, as it rambles up through brakes to three feet of elevation, and winds itself in loose masses round every support. The stalks are very succulent, the leaves pea-green, the flowers, pale pink, tipped with dark red, and the whole blossom is larger than that of the other species. This vagrant gipsy blows during all the time from May to August, and is a vivacious wild-

ing, running in and out, up and across the hedges, ever deserving from her curvets and caprioles, the praise of our ballad lines, viz. :—

“See how she dances, capers and prances,
See how she dances, every inch of her.”

Our next species is the *Fumaria officinalis* ; it was used by herbalists, and its expressed juice was sold in their shops, or officinæ ; we retain the same word in naming our offices for trade. It was considered a useful antiscorbutic ; and, indeed, any harmless vegetable must have been useful, and even required as an alterative, at a period when those who could afford the price of animal food, had, from the bad management of pasture or other feeding, no supply of fresh meat from October until April, and hard salt provisions produced various and distressing cutaneous diseases. The juice of the common fumitory is slightly bitter, and its operation produces perspiration, thus causing action on the skin. This is so common a plant in the dug ground of vegetable gardens and potato fields, that it would be needlessly occupying space to do more than refer the observer to its sea-green, parsley-cut leaves, and its pinky raceme of blossoms, which appear for eight or ten months of our mild year. Cows and sheep eat it—probably they like its slightly saline flavour ; it was used as a cosmetic by ladies, to remove freckles ; however, happily, the fairest portion of the creation have generally discovered, and wisely applied, the prescription of that celebrated naturalist Ray, which is as follows :—

“No better cosmetics than a strict temperance and purity, modesty and humility, a gracious temper, and calmness of spirit. No true beauty without the signatures of these graces in the very countenance.”

Lastly, we have the small-flowered fumitory, the *parviflora*; its distinction is chiefly indicated in its name; its flowers and all its parts are smaller than the preceding species.* It is a rare plant in Ireland. There is a little point of historical interest about it as a French plant—viz., the son of the lady to whom Rousseau addressed his very pleasing letters on botany, transmitted numerous specimens of it to Mr. Sowerby. That follower of Flora, M. de Lessert, having caught from his mother a love of the interesting science so eloquently introduced to her, which made him an ardent and very able botanist. The flowers of this Fumitory are of a deep rose colour, and the leaves of a yellowish green; but, indeed, under circumstances favourable or otherwise, the species change their shades a good deal; in moist, sunshiny weather, all their tints are more vivid, and when the atmosphere is arid their hues become languid and dilute. Burton gives the Fumitory as a plant “not to be omitted by those who are misaffected with melancholy, because it will much help and ease the spleen.” In this old and curious author we find a chapter touching on “how the body works on the mind.” Thus, “humour of melancholy,” he says, “is begotten by the distemperature of some inward part;” and he adds,

* It is very doubtful what the Irish plant called *parviflora* is, perhaps *Vaillantii* or *micrantha*.

most charitably and wisely, too, "melancholy which shall be caused by such infirmities deserves to be pitied of all men, and to be respected with tender compassion, because coming from an inevitable cause."

"The spleen with sullen vapours clouds the brain,
And binds the spirits in its heavy chain;
Howe'er the cause fantastic may appear,
Th' effect is real, and the pain sincere."

Shakspeare notices the rich but unproductive soil which is given up to the Fumitory and other weeds in consequence of war having suspended agricultural industry in France. The Duke of Burgundy speaks, in Henry the Fifth, of the country thus :

"Her fallow leas,
The darnel, hemlocks, and rank Fumitory
Shoot up on."


CHAPTER VI.

CROSS-WORT PLANTS. — STOCK-GILLYFLOWER. — WALL-FLOWERS. — WATER-CRESSES.—CRESSONARIAS OR CRESS GARDENS.—YELLOW ROCKET.—CREEPING CRESS.—ANNUAL WATER ROCKET.—WATER RADISH.—CRESS EATING MAKES PEOPLE INTELLIGENT.

A VERY numerous family of native plants now invites attention from the field-botanist, by presenting the number four to the observer in various parts of their construction. Thus, the green calyx, or outer flower-cup, is quadripartite; the blossom-leaves are also four in number, from which circumstance the whole assemblage of plants so formed are called *Cruciferae*—this name being formed from *cru*x, a cross, and *fero*, to bear or carry. They are the cross-bearers, and the holy-day processionists of the floral world. Even within the blossom the love of the number four is adhered to. There are six stamens with their delicately-suspended pollen-pods, but *four* of these overtop the remaining two, from which fact this group obtains its Linnæan name, *Tetradynamia*, derived from *tetras* (four), and *dunamis* (power), four having eminence over two, and the seeds have those first ready with ripened pollen-pods to secure their fertilization. Four of the anthers being on longer stalks than the other two, are presented thus more fully to light and air, and ripen sooner; if the early pollen should be washed away by rain, the shorter two stamens follow, and present their anthers in a few days more,

ripened and prepared in succession, to supply the injury.

Of our native crossworts the first genus is now called *Matthiola*, after Peter Andrew Mattioli, an Italian physician, who wrote a commentary on the works of Dioscorides. This genus has been separated from *Cheiranthus*, under which name it will be found in the older authors. The one species found wild in Ireland, *M. sinuata*, is so named from the lower leaves being scalloped on the sides into small sinuses, or bays, like the well known oak-leaf. It bears many adjective names, which are descriptive, such as *incanus*, "downy," it being all over covered with a cottony down; or, as Lord Bacon calls it, a "velvet rind," both on stem and leaves; this name, however, is now restricted to a more hoary species, which is not a native of Ireland. The native species is a bold and handsome flower, where it occurs on the sandy shores; and as it is easily propagated by seed, gentlemen residing near the sea would do well to decorate their marine boundaries, by sowing freely this fine biennial plant. "Stock," in its appellation, describes its robust trunk; it is the same word as stake, stick, &c. The term "gillyflower" has descended to us through a series of transmutations. Its Latin form is *Caryophyllus*, the clove-bearing flower, from the well known fragrantcy of that spice, which the perfume of the gillyflower is like; it then took the French costume, and became known under the softer word "girofle," from which our early poets constructed the English "gilofre," almost, indeed, our modern



word. Sir John Mandeville, the traveller, describes the clove-tree as a plant bearing "clove-gilofres." Chaucer says :—

"And many a clove-gilofre,
And nutmeg, to put in ale;"

probably, however, this was the clove-pink, the aromatic smell of which is very strong, with which flowers more chaffy, and less succulent, would not break up, as the petals of the stock must very soon in a drink, and give it a disagreeable flavour.

The fine sea-side resident we treat of now, breathes the invigorating salt air on marine coasts, in its woolly pilot-coat, showing from May to August its purply-blue visage, tinted as if from its favourite sea-hue, when ruffled into its deeper shadowings. Like a true Neptunian, it also bears a *three-toothed sceptre or trident*; its long siliques being armed with a *triplet of prongs in a remarkable manner*. Some flowers do not emit any perceptible perfume by day; perhaps the amount then given off by them is too quickly exhaled to be caught by human organs, and becomes thus an incense somewhere in the upper ambient ether, which is sometimes recovered on earth, in the form of scented dews; or it may be that the atmosphere is rendered too dry by the glowing sunshine, and does not present these odours in a dissolved state to our perceptions. The cause is uncertain, but the fact we know; and thus our sea-flower hoards her sweet treasure of fragrance until evening, or else chooses

a shadowy, moist day on which to yield up this most intrinsic of her attractions, when

—————"Gentle gales,
Fanning their odoriferous wings, dispense
These balmy spoils."

Our beautiful cultivated gillyflowers are not descendants of this sea-coast straggler. "The lavish stock that scents the garden round" has its parentage from the *Matthiola incana*, which is an English species, not in our Irish Flora, but whose varieties are naturalized among us everywhere, blooming of every shade of red and purple, and sometimes of a pure white, as thus noticed by Gay—

"Fair is the gillyflower of gardens sweet."

Lastly, the ancient florists called our plant "White Violet," because of the downy whiteness on its leaves and stems, and the purplish, or violet colour of its petals, as also its pleasing evening odour.

The Arabians have a reddish aromatic flower which is among them exceedingly prized; it is called "Scheyry," which name is said to have been appropriated to our next genus in the word *Cheiranthus*. We have, however, another derivation, which carries an idea with it, and accordingly aids memory; *cheir* being the Greek for hand, and *anthos* for flower, we translate it a hand-flower. Its specific distinction is also a repetition of the Greek word "cheiri." If we had leave we would soften it into "cheery," the true characteristic of this hand-flower, and of which children, who get at it, seem to think they can

never pick enough. This plant was also called from its Italian name "gilloflower," or yellow flower; not as some read it, July flower, which would most unjustly limit its bloom to a month, when its gay golden beauties shine aloft for six or eight months, according to the openness of the season. Its designation, from its mural residence, is obvious. It is the wall-flower Burns introduces into the scenery of a vision of former times, of which we adopt an extract, viz. :—

"As I stood by yon roofless tower,
Where wall-flow'r scents the dewy air,
And howlet mourns in ivy bower,
Telling the midnight moon her care—

"By heedless chance I turned mine eyes,
And, by the moon-beam, shook to see
A stern and stalwart ghost arise,
Attir'd as minstrels used to be.

"He sang with joy his former day;
He, weeping, wail'd his latter times;
But what he said, it was no play—
I will not venture it in rhymes."

Say that we give personality to our flower, as it appears tinted by the yellow light of a glowing land; the daughter of some Saracenic chief in Spain of old, who, having fled her home for love of a red-cross knight, now fearlessly hangs on the castle wall, where her warrior climbs the outward rampart to woo his lady bright.

She is somewhat wind-worn from rude exposure, "the negligence of nature;" but yet—

"Arabia cannot boast
A fuller gale of joy, than liberal thence
Breathes thro' the sense, and takes the ravish'd soul."

This personation in flowers was frequently adopted by early poets, and the wall-flower, adhering to the ruined grandeur of other days, was considered emblematic of constancy under trial. The romance, then, is easily imagined—of Asiatic complexion, “pale in her golden light,”—though ruin has fallen on her lord’s lofty towers, she clings to his home amidst all the storms of fate, watching faithfully. The lady hangs over the castle wall—a gallant soldier, yet breathing sweetness—a knight and troubadour—he scales the walls. His cheek of deeper colour, “stained with iron-brown” mark, with his dinted armour, shows how bravery won his way “with power into his lady’s bower.” A bloody warrior, though it seems unseemly in our days, secured admiration and love from the gentlest in olden time, as we shall hereby see—

“Glowing with love, on fire for fame,
A Troubadour that hated sorrow,
Beneath his lady’s window came,
And thus he sung a bold good-morrow—
‘My arm it is my country’s right,
My heart is in my true love’s bow’r,
Gaily for love and fame to fight,
Befits a gallant Troubadour.’

“And while he march’d with helm on head,
And harp in hand, the descant rung,
All faithful to his fav’rite maid,
The minstrel burthen still he sung
‘My arm it is my country’s right,
My heart is in my lady’s bow’r,
Resolv’d for love and fame to fight,
I come a gallant Troubadour.’

“Alas, upon the bloody field,
He fell beneath the foeman’s glaive,
But then, reclining on his shield,
Dying, he sung his exulting stave;

'My life it is my country's right,
My heart is in my lady's bow'r,
For love and fame to bleed in fight,
Becomes the valiant Troubadour.'

The sanguine stain won thus turned the yellow flower into the crimson bloody warrior; but this deep variety shows less tonic colours in a wild state, and gives little idea of our rich and intensely fragrant garden-flower. Speaking from their rustic home, they must admit the want of higher culture, and say in the words of Shakespeare, being but tawny,

"We are but warriors for the working-day."

The poets of nature are all full of praises and sentimental attributions to our flower, but, for want of space here, we must deny ourselves the repetition of some beautiful passages very illustratively applied to it in "The Little English Flora," and also in that delightful little work before named, "Flowers and their Associations."

It is under other connexions in the cruciferous family that the economic applications of this group as vegetables are most observable: but it may not be generally known, that the tonic and somewhat pungent bitterness of this *Cheiranthus* has recommended its use as a cure for rot in sheep, for which purpose it has been occasionally sown in pasture lands. There was a white double wall-flower in very limited cultivation in the county of Cork about thirty years ago; it was singularly beautiful and delightfully fragrant. Two gentlemen, in different parts of the county, possessed plants, but I believe both have

lost this variety. Those who remember its fine qualities regret its disappearance very much; perhaps this notice may recover it for florists who prize a good flower.

We close our history of the wall-flower by noticing the virtues which the flowers have, according to Hill the naturalist. He says, "An infusion of them when fresh is good against headache and nervous disorders. That they are good to steep in oil, to which they give a cordial warmth, and which is good against pains in the limbs;" but these are antique benefits of doubtful power. We adopt the more unquestionable charm with which our plant,

"Crown'd,

Breathes aromatic fragancies around."

The next native genus of cross-petaled vegetables is *Nasturtium*, a name very properly given to these biting plants, from each of them being a *nasus tortus*, or nose-twitcher. Pliny records that it puts the nose into convulsions; and the designation is at least as old as his time.

Nasturtium officinale is the first species; it got its place among *officinal*, or shop herbs, from its undoubted wholesome properties. In times not very remote animal food was "saved," as the process too flatteringly used to be called, in October. Salted intensely, and much of its nourishing juices destroyed, this hard, indigestible, fiery stuff was eaten during all the time up to the following April or May, and the consequence was, that cutaneous eruptions often relieved while they gave warning of a disordered state in the stomachs and the blood of thousands of all ranks, nay, even of

the opulent, because their appetites were more gratified in quantity than by quality. This made fresh vegetable food of great consequence in Spring and early Summer; and much edible herbage bore the general name of salads; thus we find their alterative value recited by Chaucer—

“ After that they went about
Gathering pleasant salades, which they made ete
For to refreshe all grete, unkindely hete.”

This “hete” might have been merely “hotnesse,” but a general cool state of body and blood would prevent its unpleasant recurrence. Our popular street-cry, announcing this vegetable for sale, has been left us in rhyme by Swift—

“ Fine spring-water grass, fit for lad or lass,”

using this familiar name with approbation, though our ancient Irish botanist, Caleb Threlkeld, complains of its being “called about the streets by the *abusive* name of water-grass, while, as he says, noble matrons make a soup of it, called lenten-pottage, along with alexanders and nettles.”

Pope, in “Homer,” tells us of a very abstinent royal fare similarly compounded, viz :—

“ His court with nettles and with cresses stor’d,
With soups unbought, and salads blest his board.”

Johnson derives the word “water-cress” from the Latin *cresco*, to increase, because of the rapid growth the plant makes. In Spring its vigorous stems and green and violet-brown leaves give indication of rapid vegetation, and also after being cut down for Summer use, a new crop appears in

Autumn, being in Shakspeare's words, "yet cressive in his faculty;" but our title may possibly be adopted from the form of the cruciate white flowers, and "water-cross" is not inappropriate to the croissette-flowers, which, cresting the green corymbs in Spring, become afterward elevated on bold well-divided spikes, by the expanding light and heat of the Summer. It is easier for young field-botanists to have this plant pointed out to them, than to convey to them its distinctions by minute descriptions, which, indeed, except by practical botanists, are easily forgotten. Rural rambles often take bread to the brook, pick their fresh water-grass, and there eat it, one warning is consequently here necessary; the leaflets of the cress are extended into a lengthened oval form, when growing in very quickly-running streamlets, and as they then resemble some of the leaves of the poisonous Umbellate plants, it is well to be cautious of eating what is deleterious—or, of being alarmed without cause, where what is eaten is wholesome. A thrifty mother, who could not botanize the cress, or did not know its modifications, under circumstances, lost her labour when she gave an emetic to her five children, who had eaten a feast no more hurtful than the long-leaved water-cress. This plant is a famous anti-scorbutic; its expressed juice has had great repute; but its corrective powers are more manifested when it makes a part of diet, than as a "diet-drink;" its good effect on the cuticle has been partly attributed to its containing sulphur, but I have not found the notes of its analysis.

In Phillips's "History of Cultivated Vegeta-

bles" is a chapter on the cresses, full of historical anecdote. He quotes the Greek proverb—"Eat cress to learn more wit," showing that it was thought to put life into the languid, and to brighten dull understandings. "Xenophon recommended the Persians to feed their children with water-cresses, to make them grow of better stature and of more active habits." The Romans recommended cresses to be eaten with vinegar, as a remedy for madness. Dodoens observes, that the sweetest milk and best butter are produced from cows who feed in pastures abounding with cresses and cuckoo-flowers; in fact, where any plants grow indicating good succulent meadow ground.

Our old friend Gerarde's notion of their virtue is worth all the rest put together. He says that the eating of water-cresses restores their wonted bloom to the cheeks of sickly young ladies. The meadow-cress is said to be anti-spasmodic, and the water-cress good against comatose or lethargic habits, low spirits, and hypochondria; in fact, it was found to be a good alterative vegetable, and thus it got its thousand various reputed powers, until Lord Bacon gave it a general good character, as being friendly to human life, its name being properly "creses," good to increase the young, and continue the older people.

We cannot take leave of this so much lauded native plant without noticing what has been done in its cultivation. "Cressonaria," as made by nature's hands, disappear before the advance of houses and reclaimed ground. This popular plant has nevertheless been required to be sup-

plied in the chiefest markets of the countries, and this demand has been acceded to. Ireland has, perhaps, too many natural cress-gardens still; although, since the time when they afforded a venison-garnish in the thirteenth century, the extent of their acreage must have been greatly limited; but wealthy England has begun, for some time back, to re-create running shallow brooks, on clayey and gravelled bottoms, so as to raise a constant supply of this vegetable. We find in the "Horticultural Transactions," that in the year 1821 a gardener has laid down five acres of a cressonaria; and it is said since then to have been increased to ten acres; besides that, several other gardeners cultivate the same crop for the London breakfast-tables. Channels of brick tiles are laid in parallel lines, about two and a half feet asunder; these receptacles being prepared about six inches wide and nine inches deep, in them is put proper soil, and water is made to run slowly through them from end to end, by means of a slight declination in the level. These plants will not flourish perfectly without clear water runs through them—mud or vegetable mucor injuring their vigour materially; water of an inch bore will, if constant, supply the wants of this vegetation. In Paris and in Edinburgh the demand for water-cresses has led to a similar expedient being adopted, to supply humanity with green-feeding in these towns.

The next Irish species of this genus is *N. sylvestre*, the sylvan very wild or wood-dwelling Nasturtium; *palustre* is the name now most

commonly used.* It grows in waste places, not in water, but on the rugged margin of stony streams. It is called "creeping-cress," from its roots wandering widely, and rooting as they run. This yellow rocket is also found in coarse moist gravelly or stony places. "Rocket" may be derived from *rochetta*, a wheel fire-work in the Italian; and the bright yellow flame-coloured rotate blossoms of this flower sustain the idea of a *rochetta*. The stem is curiously zig-zag, and the pod-stalks and pods turn up like hooks, on which to hang fairies' caps when the owners come to a sylvan merry-making.

Our next species is *Nasturtium terrestre*, a curious specific distinction for a plant which grows along with the common water-cress in plashy places, and bears the familiar name of annual water-rocket. To be sure it will grow on coarse damp ground, and is consequently more terrestrial than its congeners. It is a somewhat stiffish shrubby plant, with distinct stem leaves of a lyrate form, which are of a blackish green, but resembling much those of the oak-leaved geranium. Its firm stalk and general aspect are indeed less of a water than of a land vegetable, which fact somewhat lessens the inappropriateness of its specific name. It bears in June its inconspicuous yellowish-white blossoms; but its many podded branches are more noticeable. Several of these cresses have been eaten, and some were prized formerly for the very high acrid flavours, which are now too sharp for the general palate. With fish and meat, as a sauce garnish, no *haut*

* See Bab. Man. ed, 3, p. 20.

gout was in ancient days deemed too strong, so that the common water-cress being mild, other plants of the same family were mixed with it, to heighten its acrimony, and probably such a garnish was that described as added to strong-tasted food in our ancient Irish "Book of Rights," viz. :—"The venison of Naas—the fish of the Boyne—the cresses of the kindly Brosnach."

The last species of this genus is the *Nasturtium amphibium*; it grows close to water, on margins of clay-bottomed streams, where it is subject to frequent submersion. It is an inhabitant of land, but made vigorous by water; and so living by land and by water. It is called water-radish, the root being fusiform and reddish, which has the same meaning, although with the vowel modified, as the Saxon word "raddish;" probably this is the water-radish to which Parnell alludes in his travestie of Homer, "The Frogs and the Mice," viz. :—

"The soul of great Prycarpax lives in me;
But me no stalks nor waterish herbs delight,
Nor can the crimson radish charm my sight;
The lake-resounding frog's selected care,
Which not a mouse of any taste can bear."

This plant grows two or three feet high, and the leaves, which are submersed, often are deeply divided, which is a provision for letting the water run by, without taking such a hold on them as to drag up the root; while those leaves which are aerial are entire, the incisions being reduced to a mere serrature. The flowers, which appear in July and August, are small, but of a distinct yellow colour.

CHAPTER VII.

BITTER WINTER CRESS : DEDICATED TO ST. BARBARA.—THE EARLY WINTER-CRESS.—THE FRINGED ROCK-CRESS.—THE HAIRY ROCK-CRESS.—OUR LADY'S SMOCK, OR CUCKOO-FLOWER.—WHITLOW-GRASS.—SCURVY-GRASS, THE THREE SPECIES DESCRIBED.

THE genus *Barbarea*, is called after St. Barbara ; there is no reason given us why this lady saint takes it under her special patronage ; she presided over mountainous places when roads were somewhat more precipitous than now, but grand juries and relief committees, have superseded the supernatural help for clambering cliffs which formerly seemed indispensable. This is probably the reason why our plant is now found on stony places of low elevation, so commonly, too, as to bear the specific name *vulgaris*, usually and familiarly so designated, where, not seeking any lofty position, it wanders in waste grounds, over hedge-banks, and even into pastures. Still there must have been a day when our *Barbarea* had some higher dignity, as we find that St. Barbara's intercessions were esteemed protective in thunderstorms. "The yellow-haired god on the biforked hill," and on "Helicon's banks," knew where a plant grew, which drew the electric stream quietly and innocuously away. The old song tells us that—

"Apollo next rose and said prythee ne'er quarrel,
Good king of the gods, with my vot'ries below,
Your thunder is useless"—then showing his laurel,
Cry'd—'Sic evitabile fulmen,' you know—

Then over each head
My laurels I'll spread—

So my sons, from your crackers, no mischief shall dread."

As we have no classic laurel native on our river banks or forked mountains, possibly, the smooth and green leaves of our *Barbarea* must supply its place; and its golden yellow blossoms, if not dedicated to Apollo, can be to St. Barbara, remembering that if our elementary fulmination is less dangerous than those which the god of genius warded away, we emit at times bright corruscations of witty electric flame, pungent and pervasive from among our people. This *Barbarea* is a long-enduring plant, for it continues growing and green through the winter; it must have been a valuable member of the cress family, when the prolonged raising of fresh vegetables was little known; and as Saint Barbara's day was in December, the plant that supplied a warm bitter salad, at that scarce vegetable season, may, in gratitude, have been stamped with this name of distinction; although if the saint herself eat much of this bitter herb, it would be decidedly an exercise of palatial penance, requiring some zeal and resolution. Its leaves are a good specimen of the lyre-shaped structure; and its orange-yellow blossom, after having sported into a double flower, is well known as the double-yellow rocket of gardens. In its wild and single state it is a handsome, rather shrubby-looking plant, whose deep green leaves and golden blooms make a striking contrast in the rural parterre. It is an agricultural weed; cows will eat it, sheep are not fond of it, horses and swine refuse it. In

Sweden it is boiled like cabbage, and becomes thereby less acrid; eaten raw, its austere bitterness and mucilagenous taste require a love of strongly stimulating food to recommend it. Sometimes a small gnat perforates part of the blossom and causes irritation, attended by an extra natural growth to supply the damage done—the structure is thus deranged, the excessive vegetable development becomes remarkable, and is in shape somewhat like the blossom of the hop.

The second native species of this genus is *Barbarea præcox*, the precocious or early winter-cress. It flowers from April to October. This is not a common plant; its stations are few and remote, but where it is located it distributes its seeds pretty freely. It grows on rubbishy corners of fields, and on clayey hills; its flowers are smaller and paler than those of the *vulgaris*. The seed-pods are nearly twice as long, and exactly square. It is a smaller plant than its elder brother, and of a milder flavour, being much less bitter. It is known to English gardeners as the American Cress, and is sent to table sometimes. It is not much cultivated in Irish gardens. Caleb Threlkeld, in his Irish Botany, says that leaves of the *Barbarea* were “singular healers of old sordid ulcers, and that though common about the fields, his informant as to its virtue for the cure of a sore leg brought it into his garden as soon as it had done the feat;” and this was but a due reward to the winter-cress for its good services. We have before found that cresses of various kinds were eaten with meat and fish by the feasters of our ancient Irish times. We may

add that their verdure and loveliness recommended them to the notice of our early poets of rural life. Edmund Ryan, commonly "Ned of the Hills," names some water-cress in one of his love elegies thus :—

"Cresses waving in the stream,
Flowers its pleasing banks perfuming;
How sweet its verdant margins seem,
In their rich luxuriance blooming."

The English people are much more attached to salads and vegetables at their meals than we are, probably because they have the means of eating more animal food, which gives them a desire for its balancing and correcting contrast. Among those who could eat meat in Ireland, however, cresses, as we have shown, were formerly known and esteemed.

The following pretty poem is of rather uncertain paternity, but is found in the original Irish, and has been attributed to Carolan, the celebrated harper poet and melodist. It mentions "cresses," and enables us to introduce it in connection with that subject from Hardiman's *Irish Minstrelsy* :—

TRANSLATION.

"The doves are pairing, and Summer is near:
Deck'd with clustering green-cresses the streamlets appear,
The blossoms are bursting the tops of the trees;
And the hives are distilling the honey of bees.

"With fruits and green acorn the woodland is crown'd:
There damsels, fair damsels, are straying around,
Lowing herds, stately steeds, are near trout-peopled Lee
Fleecy sheep, graceful fawns, and I—exiled from thee.

"The birds sweetly warble—there frolic the lambs;
For the warm-streaming milk the calves seek their dams;
Fish spring in thy stream, and leap high on thy shore;
But I, and young Cormac, our exile deplore."

The next genus of cross-worts in our Irish flora is *Arabis*, so called, says Dr. Mackay, because first recorded as Arabian plants. The old mediciners of Arabia, the Saracenic doctors were close observers; their herbal knowledge was extensive, and many plant practitioners of the sixteenth century, in England and France, re-hashed the Arabians, and encumbered their prescriptions, so as to conceal the value of some receipts by their superfluous and inane quackeries. The first species is *Arabis ciliata*, the fringed rock-cress, so called from the edges of its small green ovate leaves having a row of hairs like eye-lashes; also from its cresting the dry crevices of rocks on the sea-shore, or on inland cliffs. It is rather a scarce plant; but one of its chosen residences is a place of note, viz., the stony shore of Derrynane. It is found in the English Botany under the name *Turritis alpina*, because the leaves have a somewhat imbricated, or turretted superposition. This may be a fair cause for the name, yet, as it clings to mortar on lofty turrets, it may thence be called the *Turritis alpina*. It sends forth its unimposing white blossoms in July and August. When the pods of seed are ripe, a touch causes them to burst, and scatter the seeds, so that many are projected into crevices between stones, and are deposited in the proper places for growing. It is probable that the action of the sunshine on the pods naturally produces this dispersion of the seeds, as it does in other plants with siliques, or long pods. The only distinction of a popular kind which separates this species from its congeners is, that the calyx, or blossom-cup, is tawny.

Our next species in the genus *Arabis* is *hirsuta*; compared with the previous plant it is hirsute, being covered all over with small hairs. It is accordingly the Hairy-tower Mustard; it grows on walls, and on calcareous rocks; its white flowers appear in June, on a stiff straight stalk, of a foot or more high. Its root is strong and woody, which enables it to have a perennial life in its dry and exposed habitation. The root-leaves are egg-shaped and toothed, while the stem-leaves are spear-shaped. This plant, like many others, if cultivated, loses much of its hairiness, and grows taller and more elegant. We see that even a plant which, as a mountaineer, shows something of a rugged exterior, when brought within the pale of civility, assumes the character which softening circumstances produce, indicates also better intercourse, and declares the humane polish in its aspect.

Our next genus is *Cardamine*, from "*cardia*," the Greek for the heart, and "*damas*" to fortify. These vegetables were supposed to strengthen and give heartsomeness to those who used them. The first species is the *Cardamine amara*, the large-flowered Bitter-cress. The root-leaves are roundish, and the broad upper stem-leaves are angularly toothed. The stem throws out roots close above the ground. It exhibits its large white or cream-coloured flowers in April and May, with pretty purple anthers; it is about a foot high, and greatly decorates wet meadows in the first month of Summer. This plant throws up suckers which may be divided and planted to ornament the banks of ponds. As its specific name indicates, it

is bitter; but its bitterness is of that aromatic kind which recommends cresses to general use; and this vegetable would blend well in a salad. Like many cruciferous plants, it contains an acrid oil, and a large portion of nitrogened material; the first property makes it anti-scorbutic, and the second recommends it to ready assimilation in the human stomach. When much of it is thrown in a heap, it gives out ammonia, showing its value as a manure. Sheep crop it readily, but cows dislike its bitterness. Beautiful butterflies live on the different cardamines, and those who attend to native entomology, will do well to make acquaintance with this genus of plants.

We now come to the species of *Cardamine* which has attracted most notice by its beauty and plentiful early bloom. The *Cardamine pratensis* blows in fields which are a little boggy, and in such profusion in May as to look like linen bleaching. On this account it is likened to the under-dress of the fairer part of the creation, when placed to whiten in the soft sun-light of the young Summer. Shakspeare records its seasonable appearance—

“When maidens bleach their Summer smocks;”

bleaching demanding a more lightsome season to produce whiteness than—

“When milk comes frozen home in pail;
When blood is nipped and ways be foul.”

Our Lady's-smock. The prudery and uneasy purism which chooses to take alarm at this old name for our plant is as superfluously nice as was

the French-millinery modesty which has introduced to us the Greek word for winter-quarters, *cheimadion*, Gallicized into the softened form of chemise. Our old truth-telling title, shift, gave us a wholesome, pure, and pleasing idea associated with the intimate envelope of our British and Irish fair companions. It told us explicitly of many changes of raiment by the shift, fresh and fair like its inhabitants; while the chemise, or winter-quarters, throws some doubt on the desirably frequent prophylactic processes of the tidy, *query* cleanly, grisettes of Gaul.

In the Ray papers for 1849, page 288, Jul. Münter tells us of the propagation of our plant by its leaves, and explains it thus:—The hemispherical nodule from which the new plant is developed occurs at the spot whence the three principal nerves of the leaflets radiate into the leaf. In addition to this a second bud frequently rises from the middle of the central rib, and when the leaves are separated from the plant they live under water, and emit young plants. We must add a Shakspearian legend about our delicately tinted and shaded flower, and the origin of its prettiest name. King Oberon tells us—

“ I saw
Flying between the cold earth and the moon
Cupid, all arm'd, a certain aim he took.

* * * * *

Yet mark'd I where the bolt of Cupid fell;
It fell upon a little western flower,
Before milk-white, now purple with love's wound;
And maidens call it Love-in-Idleness.
Fetch me that flower; the herb I show'd thee once,
The juice of it on sleeping eye-lids laid

Will make the man or woman madly dote
Upon the next live creature that it sees."

Shakspeare is sweet and sentimental herein;
but our Swift riots in riddles, and here is one—

"A long-ear'd beast, and a word for 'jeer,'
To the fairest of creatures is ever near."

My lady's toilet, told over in Swift's time, would solve this secret; and to go farther with our readers, would be to edify them with the malediction, "Strike, you stupid," can't you guess?

The French and our ancestors religionized the poetry of this flower; it appears with them in March, much about the period of the festival of the annunciation to the Virgin, and this vegetable's snowy-robe is called accordingly, "*Chemise de notre Dame*," or "Our Lady's-smock." It is also named the Cuckoo-flower, because with us, blowing somewhat later in the year, the cuckoo often clarions its "opening days;" but indeed the flower has more often to wait for him than he for her. Shakspeare makes his "cuckoo-buds" yellow, and describes the lady's-smock so accurately, and at the same time poetically, as to forbid mistake; and by his text we will correct all other poets. Of Spring and young Summer he sings—

"When daisies pied, and violets blue,
And lady-smocks all silver white,
And Cuckoo-birds of yellow hue,
Do paint the meadows with delight—
The Cuckoo then on every tree,
Thus sings he—Cuckoo."

It is probable that the cuckoo-buds alluded to are those of the marsh-marigold, which inhabits

the margins of slow-moving streams and dykes, in wet meadows, making a part of the same flora with the cardamines. It is a showy flower, and its buds, when nearly bursting, are tipped with a fine gold yellow, above an emerald green cup. Our cardamine is from one to two feet high; its flowers, when fresh from nature's humid care, have been slightly touched with blue; the sun turns this tint to a delicate rose colour; and, finally, it receives the snowy whiteness on which its familiar name is founded. Sometimes this plant sports into double flowers, and it is then well deserving of a place in the garden.

Our last species of *Cardamine* is the Hairy Lady's-smock. In it the naiads and dryads must have done penance, otherwise these "delicates" would have banished from their wardrobe so hirsute a garment. It is a low hardy plant, tufting the ground with its lower leaves so densely as to destroy any seeds of other vegetables which may strive to grow under it. These lower stem-leaves have also the rather remarkable property in the history of native foliation, of growing and becoming plants; the leaves, to succeed in this phenomenon, must be sustained in life during the process by remaining adherent to the parent, so that the process is like the layering of pinks, except that the leaf-stem is the bond of union, instead of the stalk-stem. In the *Cardamine pratensis*, the double variety most readily yields to this cactus-like mode of increase, which goes to show, in addition to other proofs, the very high essential character of the leaf in the organism of plants. This species is found in various soils and

situations; in wet places it is succulent, and about a foot high. On dry gravelly spots it is from three inches to nine in stature, and there it becomes more dense, tufted, and hairy. It is an annual, and bears its small white blossoms from March to June. Like the other species, it mixes well as a warm bitterish cress among the materials of a salad. All the species of this genus have been used as medical herbs. Ray, the naturalist, gave the flowers in hysteric complaints. They were certainly perfectly harmless, and in a complaint of a nervous character they were well fitted for giving hope to the patient—a most important curative aid—and doing no harm to the stomach. We find, in the history of “the cures of cardamines,” that one practitioner gave the whole flowering tops to nervous patients, with the same happy results as those who more cautiously gave the floral leaves. This anomaly confounded an afterward “mediciner,” and no wonder; but he does not venture an explanation. We have an accurate description of how to prepare the flowers of Lady’s-smock, by toasting them on pewter dishes over a fire, and boiling the powder, which is to be covered with leather, for no cork is admissible in the bottle; this is all very imposingly pharmaceutical, and well contrived to aggravate a willing belief in its powers; but a knowledge of the dissipating effects of toasting on the acrid oil which flavours these plants, would lead us to think that the dose of twelve grains of the powder three times daily must have contained but an infinitesimal amount of any active property. The time, labour, and vegetable accumu-

lation devoted to these nostrums were marvellous, and perhaps gave them value. It took a bushel of the flower heads to make a quart of this one precious cure—an anciently-invented homœopathic powder for epilepsy. It is more to our purpose, however, to admit its claim as an anti-scorbutic—a property which it possesses in common with nearly every edible cross-wort, or tetradynameous plant. To produce this effect, however, they require to be used, not as drugs, but as diet-herbs.

The numerous order of cross-worts has been for convenience divided into tribes; and, as the next group has something indicative in its divisional epithet, it may be noticed. This tribe is the *Alyssineæ*, most of the plants belonging to it being good for stimulating languid sores, when applied as a poultice were imagined to have sprung upon the rocks of the Illysus, a fountain of Arcadia, whose waters had the virtue of curing the bite of a mad dog. The first genus of this tribe is *Draba*, a mutation of the Greek word *drabe* "acid," a property of the leaves, and of many of the species.

Our first native species is *D. verna*, the Spring or common Whitlow-grass; so called from having been usually applied to those distressing inflammations as a poultice, and found, from its stimulation, to be useful. In March and April, the little green star of leaves, which clings to the tops of clay banks and dry walls, throws up the light stalk of white flowers which adorns it. A gravel-pit is an excellent place to look for it, or in the crevices of old bridges, adhering to the mortar. This little annual plant, in the month

of May, splits open its seed-sheaths at the base of the receptacle, and thus scatters the seeds into cradles sufficiently secure to nurse them for a new birth in a new year. It is to be noticed, that it droops the tiny flowers to keep its stamens from the chilly night-dews of our early Spring. There was among our mediæval herbalists a great discussion whether this plant, or some other allied species, was the true whitlow-grass of the still more ancient herb-doctors; but modern writers on medical botany have slighted the plant and all inquiries respecting it. The *Draba verna* has also received the Greek name *Erophila*, a pretty *express* of its early appearance, conveyed in the words "*er*," the Spring, and "*philo*," to love.

Our next species is *Draba incana*, or woolly whitlow-grass. When young it is sheltered by a slight woolly clothing; but as it gets strong, and the season advances, it drops its infantile protection, which was pranked on its leaves in cottony stars. It bears its white notched petals in May and June. These are succeeded by little seed-pouches, which twist their backs from the sun, and from this cause the plant is also called the twisted padded whitlow-grass. It grows on cliffs and rocks, and is a larger plant than the preceding.

The useful stimulating qualities of these herbs as a cure for paronychia, may have been further recommended by the resemblance of the seed-pod to the "whiteflaw," or inflamed vesicle, which it was intended to allay. The "white-low," or white-burning, is very sensibly understood by those who have suffered its distress; and even

the little sac, though no bigger than a pea, with its whitish-yellow colour, when encased under the finger-nail, produces, as is well known, a very distressing amount of hot feverishness and acute pain.

The genus *Cochlearia* comes next in order. It is named from the shape of the leaves of the smaller species, which is somewhat like the bowl of a spoon, of which cochlea is the Latin. We may give it, then, its old English name, spoon-wort. The first species is the well-known *officinalis*, or drug-shop cochlearia, famous and deservedly so as the common scurvy-grass, so called from its known good effects as an alterative in scorbutic cases. It is met everywhere on muddy sea-shores, on brackish banks, and on rocks near the coast. It also shows that rocks and sea-coasts in some things resemble inland mountains, as we find it, although cautiously disliking intervening lowlands, seizing the remote cliffy heights of the interior country. Salt river-walls, even within towns, strands, and beaches where clay meets sand, abound with our plant. Its deep shining green leaves are well known, and in May and June its snow-white petals make, with its intensely green leaf, a strong and showy contrast. Much of the fame of this plant has been derived from its being the most plentiful wholesome vegetable which sailors, after long voyages, meet on sea-coasts. It is very universally distributed, the various species having many good properties in common, and being found over much of the navigable world. Several of our circumnavigators record its value to the scurvy-prostrated sailors.

The next species is called *Cochlearia Anglica*, English scurvy-grass. It is by no means limited to England, as it is found plentifully with us; in Denmark, also, and elsewhere, it is very general, but seems to keep more strictly to the saline districts than the former species. Its botanical distinctions will be found in systematic books; but it is popularly recognised by being not more than half as large a plant as the previous one; and yet its seed-vessels in June are twice as large. It is thought that this plant derives its specific name from the fact of Cæsar's making an acquaintance with it in Britain, getting it afterwards in Germany, and applying it with success to the cure of scurvy, which was very severe in the Roman army there. It was named by Pliny the *Herba Britannica*.

The third Irish species is *C. Danica*, the Danish Scurvy-grass. From the shape of the leaves, it is also called Ivy-leaved Scurvy-grass. It grows where the preceding kinds do, and also clambers up on the roofs of old thatched houses near the sea-side. It is the smallest plant of the genus, and the angularity of its almost triangular fleshy leaves guides those vegetarians to it who, enclosing it between bread and butter, eat it as a salad to purify the blood. It has, like its previously-described relatives, a slightly bitter, cress-like taste, and contains a pungent essential oil, from which its stimulative power is derived. Herbalists who seek to preserve this property in the desiccated plant must fail, as heat or drying dissipates its slight acidity, and all effects accordingly. The name *Danica* records the notice taken

of this plant by northern seamen. Maartens and Egede have especially lauded its curative effects ; and when the old mode of victualling ships with furiously salt meat is remembered, it is easy to believe that a fresh and wholesome, though simple, vegetable, must have been quite a luxury to sailors ; the salutary consequences on their health producing a liking for it, as is the case with many condiments where weakened digestion sometimes requires them. The imprisonment of long voyages, the want of variety and pleasing occupation, must have made unwholesome food more injurious to health. Scurvy was induced, and languor and depression of spirits made it chronic in many cases. Touching land was, probably, the great prophylactic to the wearied seaman, and with it the scurvy-grass was a helpful cure. The white blossoms of the *Cochlearia Danica* appear in April ; the leaves are very succulent and fleshy, and the seed-pod is much veined. Dirty habits, gross feeding, vulgarity, and want of refinement, if not always the originators, were the constant companions of cutaneous diseases ; so constantly, indeed, that a rude, vulgar, indelicate manner, had the name of the disease applied to it, as a quickly-apprehended description. Shakspeare uses the word several times in this sense, and mixes the manners and the disease as interchangeable ; for instance, the Welsh parson, in the *Merry Wives of Windsor*, complains of being made "a flouting-stock," and resolves to be revenged "on this same scall, scurvy, cogging companion, the host of 'The Garter.'" And in *Troilus* and *Cressida*, Ther-

sites the boaster, mixes up dirtiness, meanness, and want of gallantry, or poverty of spirit, with his "scurviness," viz. :—

Hector.—What! art thou Greek—art thou for Hector match? Art thou of blood and honour?

Thersites.—No, no: I am a rascal; a scurvy railing knave; a very filthy, filthy rogue.

Hector.—I do believe thee—live.

And, now, so much for scurvy and its vegetable remedy, scurvy-grass.

CHAPTER VIII.

HORSE-RADISH OR LADLE-WORT: ITS USE AS A CONDIMENT.—VIPAROUS ROOTS: ITS CURE FOR HOARSENESS: IT EMITS SUGAR AND CONTAINS SULPHUR: USED AS A COSMETIC.—THE BEST RECEIPT FOR BEAUTEOUSNESS.—PENNY-CRESS.—PURPLE SEA-ROCKET.—WHIPPING PEDAGOGUES.—THE DAME'S VIOLET.—ORIGIN OF THE PURPLE AND WHITE ROCKETS: HOW TO PROPAGATE THEM.—VESPER FLOWERS.

THE last Irish species of the genus *Cochlearia* is *armoracia*. The word is said to be constructed from the Celtic particles "*ar*," near; "*mor*," or "*mar*," the sea; and "*rich*," over against; that is, a plant growing near the sea. Like many other marine plants, it is often found in mountainous places. Its name, *Cochlearia*, must be accepted largely, as its great leaf grows into a ladle, and instead of being only a "Spoonwort," we might fairly call it a "Ladle-wort." It is, however, popular enough under its well known name, horse-radish, because the heat of the radish is in it, multiplied by the strength of the horse. Though often thrown out in garden rubbish, it is also met with truly wild; and in wet fields, near Mallow, Mr. Drummond discovered it aboriginal. It is also found at Blarney. It is needless to describe this large coarse vegetable; one look at it in a garden will fix it in the memory sufficiently. Those who want its blossom, to place in a herbarium, will find it in flower in May.

The culinary use of horse-radish root, scraped, is well known as an accompaniment at table to the

roast-beef of old England. Perhaps, if people eat the fat too greedily, such a spicy stimulant may give tone to digestion, and help to repair the harm done by voracity. Those, however, who regulate their epicurisms, will find the flavours of wholesome and well-dressed meats quite piquant enough to ensure for them the wish, "may good digestion wait on appetite, and health on both."

Plants which have numerous bulbs, or viviparous roots, producing shoots copiously, very often seed badly; their energy being thrown upon one mode of reproduction, the other is less required. Horse-radish is an illustration of this law; its blossoms, as compared with the whole bulk of the plant, are very few; but the creeping roots are numerous, and every bit is instinct with vitality. In parts of France the roots are steeped in water, to wash away some of their acrimony, and they are then boiled, or fried in oil, as a vegetable. The root sometimes emits a sweetish juice, but not in sufficient quantity to be of any value as a sugar. Those who scrape or shred these roots, know well how its pungent vapour catches the nose, and stimulates the tear-vessels of the eyes; but as an old naturalist remarks, "these titillations reach not much higher than the senses." The disciples of Culpepper will find various cures attributed to this plant; a syrup of horse-radish for "the hoarseness," is not absurd; it may give tone and excitement in cases of laryngeal debility. The anti-scorbutic uses, common to all the cruciferous plants also belong to it; but old Threlkeld remarks, that while in sauces, it "whets the appetite, it hurts the head," as provocatives to excess

must do. Einhoff, the chemist, has examined these roots, and found that their characteristic acrimony is derived from a volatile oil, somewhat in appearance like the oil of cinnamon. Its taste was at first sweetish, but it was afterwards very acrid, and excited inflammation in those parts of the lips and tongue where it was applied. It is more heavy than water, and, in alcohol, retains its properties when dissolved into an essence. Like many of its congeners, it affords, by distillation, traces of sulphur, which mineral is in its separate form a well known specific against some of the most annoying forms of cutaneous disease. The essence of horse-radish is, like other species, sometimes effective against tooth-ache. It should be remembered that this acrid root, when taken into an empty stomach, has been found deleterious, and once it proved so to such an extent as to be quickly fatal.

We thus see that many provocatives and stimulants are more or less magignant; and as their evil effects require to be mitigated by food, or by other "confounders," it is doubtful whether delicate people should use them at all; although ostrich stomachs seem to suffer little from taking their indigestibilities acrid and hot. It is said that a spoonful of horse-radish root scrapings, put into a pan of milk, will keep it sweet for several days. This could be easily tried, but the cause of the imputed effect is not obvious.

Gerarde tells us that "Diners thinke that horse-radish is an enemy to vines, and that the hatred betweene them is so great, that if the roots hereof be planted neere to the vine it bendeth

backwards from it as not willing to have fellowship with it." Probably this marvellous antipathy is explainable by the vigorous demands both plants make on the soil, which causes them to be jealous and exhausting neighbours.

The cultivation of this plant is described in gardening books. The only matter peculiar about it is, that, as is the case in many of the other cruciferæ, a moist soil increases its acidity. This plant has not received any position in poesy, except a satirical one. Mrs. Reddish, of ancient theatrical fame, was clever, but knew how to say a biting thing; and her manners, even on the stage, were sometimes rude and coarse. One wit of the day, on whom she had exercised some of her acidity, accented her name as "Radish," with the prefix of "horse" to it. It was made into an epigram afterwards, which said that if she was Mrs. Radish, it must be Mrs. Horse-Radish; but the metre would not excuse the vulgarity of the jest for insertion here.

The last use we shall record of this *Cochlearia* is the old perfumer's prescription; it was bruised with milk to make a cosmetic. There can be no doubt of the value which is naturally belonging to personal beauty, and, without at all detracting from the truth of the old couplet,—

"'Tis not the pleasing tincture of the skin,
But peace of mind and harmony within,"

we are bound to say that it is every one's duty to look as well as possible. Even the jewel of the mind may properly have a befitting case; and the appearance which gives most pleasure to

friends is, so far, a gift to all the receivers. A poor woman expressed the idea well, when she said to one whose expression pleased her—"Heaven reward you, you have a blessing in your face." Much more time was formerly expended on the outside than the inside human beauties; and unless that best fairness exists, which can beam brightly through the darkest skin, the most potent cosmetic will vainly be applied to "wash the blackamoor white." This idea is very prettily conveyed in the following lines of an observant poet, C. H. Sherive:—

"Tho' Venus' handmaids three, adorning
Your lovely form, delight to stay;
Tho' softer than the bloom of morning,
On your bright cheeks the blushes play;

"Yet pardon, pardon, lovely maid,
The rash presumption of your poet;
Take one cosmetic to your aid,
And tell the world, for all may know it.

"'Tis neither wash, nor patch, nor paint,
That will our ready hearts beguile—
It is, and would become a saint,
The sweet cosmetic of a smile.

"Nor use it only when you dress,
But on your mein for ever bear it;
O! 'tis an amulet to bless
But those who see, and those who wear, it.

"Nought from your lip a smile should sever,
For life a tenant let it be;
'Twill brighten all your charms for ever,—
And bend, O! bend, that smile on me."

The next native genus of flowers we have is *Thlaspi*, so called from the Greek word "*Thlao*," to flatten, which refers to the flatted form so remarkable in the seed-pods. We have but one

species—viz., the “Arvense,” or field-growing *Thlaspi*. It is a very rare plant, but is worth the discovery, when found—not for its small inconspicuous blossoms, which lend their white petals to its inflorescence in May and June, but from the remarkable structure of its large seed-pouch, fringed with broad borders or wings; and the curious circumstance, that the anthers of the flowers are, like the seed-pocket, heart-shaped. The plant is about a foot high, and somewhat branchy. The common name of it is “penny-cress.” The old coinages often had a heart stamped on them, which gave the idea of money to the heart-shaped pod, and the flat seed of this little plant, a tiny silver penny being its metallic prototype. The penny-cress, when bruised or chewed, is slightly acrid, with somewhat of the odour and flavour of onion or garlic; and having been used in sauces, from its stimulating quality, was called by the general name of mustard. Medicinally the term “Mithradate” was prefixed to it because Mithradate, King of Pontus, was a famous mediciner, who compounded poison-resisting draughts, and tried them on himself, as he reported, with success; however, he is shrewdly charged with having applied his powers of herbalism as an anodyne in a domestic way; and, knowing the plants which prevented all perception of suffering, it is recorded that he gave a very skilful dose to a disagreeable queen of his. Modern drug-doctors, and doctresses, however, poison more slowly than this king-doctor; the modern practitioners—our quacks—only undermine the tone of the stomach

by rubbishy potions, and their mischiefs are, of course, less obtrusive and notorious. Mithradate mustard used to be blended with sugar, and it certainly could not have been with it alone that the King of Pontus poisoned his wife, as it seems a very harmless and inefficient compound, although Pliny tells us, that it is "a singular good confection." Its assumed preventative and curing powers are thus noticed in a simile, by Dr. Donne:—

"But you of learning and religion,
Virtue and such ingredients, have made
A Mithradate whose operation
Keeps off or cures what can be done or said."

The next native plant we meet with is the *Cakile*—a name appropriated by the Arabic doctors to this, or to some allied, vegetable; and *maritima*—its specific title is derived from its place of growth, the sea-side. The purple Sea-rocket of our coasts, and more especially of our sandy shores, is a bushy succulent plant, with crooked branches—showing in June and July its purplish white flowers, which are succeeded by thick, fleshy seed-pouches. It looks somewhat like a candy-tuft, or small variety of stock gilly-flower. Addison says, "Every rock endeth with a constellation, strewing the air with a shower of silver spangles;" and so it is with our sea-rocket—its head or terminal cluster, is a group of "silvery spangles," and, on a bright day, is a gay object on the shores of our waters. This, like many of the cruciferous vegetables, may be eaten mixed with other plants, being as an old writer, Mortimer, calls it, "one of the salad fur-

niture ;" but alone it would be unpalatable food, being acrid, and possessing an alkaline taste. It is drastic in its action on the intestines, probably from its mustard-like pungency and saline juices. Pliny's history of its virtue would make it very welcome to truant school-boys, who may have the misfortune to be dragged up, not brought up, by one of the old fashioned flogging pedagogues. Our old Latin naturalist says, "That whoever taketh the seed of rocket before he be whipt shall be hardened that he shall easily endure the pains." Those brutal old torturers, whipping schoolmasters, are now nearly extinct ; and, consequently, supposed charms to subdue the suffering from their indolent and very ignorant cruelties need not be appealed to any more. It was no wonder, when malignant and unreasoning inflictions were permitted by parents to be perpetrated on children, that an appeal should be made to vegetable magic, as the parental affections did not shield them from such superfluity of wicked barbarity. Locke tells us, that teaching "requires more than setting children a task, and whipping them without more ado, if it be not done to our fancy ;" and the ever-observant Shakspeare notices the mean servility which corporeal punishment induces, when Antony degrades Thyssus by base punishment, in his order to

" Whip him, fellows,
"Till, like a boy, you see him cringe his face,
And whine aloud for mercy."

How could self-culture—that most energetic power—manly industry, or vigorous progress

flourish, when parents or tutors were tyrants over whipped and terrified slaves?

Threlkeld, and other old herbalists, called this plant *Eruca marina*, the why is rather doubtful; we will take it to be a form of "eructo" or eructation, that disagreeable slight convulsion of the stomach, which is called "repeating of food," or tasting it again; the vegetables we are treating of, if eaten raw, or only partially dressed, are rather indigestible, and often produce this effect, which is described simply, but well, by Dr. Arbuthnot, viz.:—"The signs of the functions of the stomach being depraved are eructations, either with the taste of the aliment, acid, inodorous, or foetid;" in fact, a kind of fermentation goes on where digestion ought to be quietly and wholesomely in operation. It would be worth while to transplant a root of sea-rocket into a garden away from the sea-sand, and try whether it would still continue to secrete from the soil enough of salt to retain the remarkably strong saline taste which distinguishes its juices in its native habitat. After blossoming, the flower-heads lose their clustered form, the branchlets of the seed-pouches elongate, and the seed-vessels appear almost in racemes, like the fruit on a currant-tree. As the plant grows from six to twelve inches high, the rambler at the sea-side can readily recognize it.

The *Hesperis matronalis* is our next wild native. It is so called from "*hesper*," the evening, and "*matronis*," a mother—"the Mother of the Evening." For once, the most accurate Linnaeus is at fault: he calls this flower scentless,

because it was by day he observed it ; for in the evening, as its popular name declares, it sheds about it delicious richness. There is a variety, however, which has only a very slight scent at any time, and this was the plant which Linnæus adopted as the specific type. We have a *Hesperus* sung sweetly by Milton, where the Spirit in Comus, as the poet says, “epilogizes,” viz. :—

“To the ocean now I fly,
And those happy climes that lie,
Where day never shuts his eye ;
Up in the broad fields of the sky,
There I suck the liquid air,
All amidst the gardens fair,
Of Hesperus and his daughters three,
That sing about the golden tree.
Along the crisped shades and bowers,
Revels the spruce and jocund Spring,
Graces, and rosy-bosom'd Hours,
Thither all their beauties bring.”

But this father of the Hesperides is not the hesperus after whom our flower is called. If he ventured on a night excursion at all, it was but to bring in the day, and to call Aurora in her “pinky morning light.” Happily, we find a softer parentage, a mild ancestress, in the evening star for our hesperis, and in paradise itself she shines :

“Now came still evening on, and twilight gray
Had in her sober livery all things clad ;
Silence accompanied, for beast and bird—
They to their grassy couch, these to their nests—
Were slunk ; all but the wakeful nightingale—
She all night long her amorous descant sung.
Silence was pleased. Now glowed the firmament
With living sapphires. Hesperus that led
The starry host, rode brightest ; till the moon,
Rising in clouded majesty, at length,
Apparent queen, unveiled her peerless light,
And o’er the dark her silver mantle threw.”

It is, then, from this dew-begetting queen and her soft power that our plant is called the Matronal Hesperis. Sweet is it at the hour of evening, and yielding then

“Its stream of balm, most sovereign and dainty dear.”

The common name of this wanderer in hilly pastures is “Dame’s Violet;” its pale pinky blossoms having recommended it to the cottage gardens of rural dames, and suggested a rather far-fetched resemblance to the single violet’s blossom; or, perhaps, indeed, the perfume was what gave the notion of this relationship. It is found in the rubbish of old gardens by the way-side; but in its wild single state, can scarcely hope to be permitted on a visit into the modern parterre. Our hesper, or vesper-flower, was described by that patriarch of herb-seers, the English botanical antiquary, Gerarde, so long ago as 1597. It is probable that the beautiful columnar flower, the double white rocket, is a sport of our plant, produced by the multiplication of its petals, and by a modification of other organs into petals. It was first noticed in Italy, and our garden flower is said to be a native of that fine climate. Its name is derived from our Southern neighbours, being the French word *rochet*, a white gown, hardened by its journey into the English rocket, as our children’s frocks formerly were called. The resemblance of the plant to our Stock-gillyflower is recorded by Miller, who styles it very appropriately Queen’s Gillyflower. It is a triennial, and can only be made perennial by taking off cuttings, and striking them carefully; so it is apt to

be lost in gardens; and it is a pity it is not more generally looked after now, for a more beautiful Summer's bed than a couple of dozen of queen's gillyflowers cannot be produced.

The simple way of multiplying these plants is—after their flowering, for you need not lose your blooms—to cut the stalks into lengths of about four inches, and stick them into flower-pots of loamy earth, the forcing up a little of the bark tends to cause the roots to protrude soon; press the clay well to them, water, and shade them from the sun and wind, but do not rot or mildew them, and you may secure a family of healthy children in white and blue rockets, to be gay and bright in your sunny flower-knot; they, like all young creatures, however, desire fresh air, they pine and are sickly if confined to cities; although they may be bloomed in sun-warmed windows, when placed there in a blossoming condition. We could say much more about this queen of cross-bearing flowers, with her snowy or purple frock, “all flounced and furbelowed;” but, alas, her exuberance of beauty and wealth of dress, dooms her to “keep a pale-faced maiden ever;” her external attractions are her all in all, for she exhales no sweetness; while her more simple rustic relative, the matron-rocket, is parent to a family, and diffuses influence round, most pervasive in the quiet homefelt evening hours. Exhaled as a most delicate odour, when, as quaint old Dr. Donne says, she shall be

“Exalted more for being good,
Than for her interest of motherhood.”

And now, we may make our *bon-repos* to our

vesper flower, using some pleasing lines for our farewell, which run nearly thus, in Withering's Botany:—

“ Still may thy shadowy beauty bloom
When stars give quiet light;
Your offering still, a soft perfume;
Your shrine, the silent night.

“ Rich and profuse the breath you send
Through air, though none are nigh;
Oh! 'tis your incense from the earth,
Your tribute sent on high.

“ Emblems are you, night-scenting flowers,
Of hope to sorrow given;
Strongest, through tearful darkling hours,
Are breathings into heaven.”

CHAPTER IX.

HEDGE-MUSTARD OR SCRAMBLING-POCKET.—ROCK-GENTLE OR LONDON ROCKET.—FINE-LEAVED HEDGE-MUSTARD.—WHITE GUNPOWDER.—THALIA'S CRESS.—SPRING FLOWERS AND THE SPRING THAT BRINGS THEM.—WALL-FLOWER.—HEDGE-MUSTARD.—TREACLE-MUSTARD.—WHAT TREACLE WAS.—ONION-MUSTARD.—ODOROUS CONDIMENTS.

THE next genus of cross-bearing flowering plants we have in Ireland, is called *Sisymbrium*. The application of this generic name is not obvious, or it is altogether misplaced; we find it mentioned by Ovid as part of a nosegay, of sweet scented flowers, recommended to Venus herself, to increase her attractions; the group is formed of myrtle, roses, and *sisymbrium*. Let us try what flower could it be? "*Sisybos*" means a fringe; and "*brechio*" wet, or water, from which comes our English word, "brook." It was probably a water-mint, with its collar or fringe of flowers round the stem, called in botany "a whorl." No doubt such a coarse perfume as spearmint affords, would not now be chosen by a young beauty to delight the sense of smell; but by the observations we can make, modern waiting-maids are more refined in all their tastes, than were the very goddesses of the ancients. Not one of our *sisymbriums* goes near the water now, so we must give this name as arbitrary, and not as descriptive; a rare circumstance, indeed, in the biography of plants. Even on the first portion of the name, "*Sisybos*," a fringe, I fear we have but little claim,

nor is it very indicative of corresponding structure. Donne tells us certainly that the roots of some of the species "are fringed." What a fringe on a root can be, which is all a tassel, we must find out by seeking. The field and way-side botanist may, therefore, pull up some of the tribe, to look for the fringe; but as the names of plants have generally been given from more obvious structures than such a doubtful underground form, if we use this Greek word as an artificial aid to memory, let us apply it to the blossom-stalk of the first species, which has indeed a range of closely adhering pods, springing from its column through its whole length, and terminating in a small golden tassel of flowers. We have spent some time trying to trace the name of a genus the sixth species of which is one of our commonest annuals, because as we are doomed to meet with it on every heap of coarse rubbish, or piece of waste ground, it is well to know as much as we can about it. It is the *Sisymbrium officinale* of Linnæus. Its lyre-shaped lower leaves and halbert-shaped upper leaves, are easily recognized; while its straggling, wiry, whip-like branches are well described as "being small, limber, yet very tough, and will twist and writhe, as doth the ozier, growing in untilled places." This pliant plant is often used by boys for a whip; and as a kind of cat-o'-nine-tails affords them a facility to "make each other smart." Its commonest name now is Hedge-mustard, which is obviously derived from the general acridity of the plant, and more particularly from the bitterish heat of the small seeds. Its saw-formed, or runcinate

leaves, when "slashed" and bruised, have what our keen observer Gerarde calls an ungrateful smell. It was considered a tonic for a relaxed throat, and good against hoarseness. Under the characteristic name of Scrambling-pocket, Threlkeld, our ancient Irish botanist, lauds its pectoral virtues, when made into a syrup; and once again to quote Gerarde, he recommends it for sciatica, if it be taken with honey. Galen says, "it is of a fiery temperature, and doth thereby attenuate, melt, and make thin, which is the reason of its reputation in discussing rheum." Withering tells us that birds love the seeds; cows, horses, and even swine refuse it, but sheep and goats eat it. This member of the very democracy among plants has now had its biography fairly and fully given.

Our next native species is the *Iris*, the *Sisymbrium*. To look at its appearance, we do not discover any of the playful lights or tints which adorn that irradiate goddess; neither do we readily perceive why it should be named after her, or dedicated to her with any marked appropriateness, for our plant is a very plain-looking weed, with its long pale-green leaves, and group of lengthy pods, enclosing a centre of regularly progressing yellow blossoms, which, showing themselves upon otherwise naked wastes, were considered in former times to make such a "gal-lantee show" as to be called "rock gallant," and from its enriching or adorning these rubbishy crags, it was also dignified by the name "rock gentle," it having thus civilized or "gentled" these rude and barren "scalps and rifts of land."

This plant has, at least, the praise of hardiness—

“She is of nought afraid,
Through woods and waters wide.

Having inquired of various god-fathers why this wild child of our rudest places is called Iris, we must supply an extemporaneous reason. Iris is the grand-daughter of watery Neptune; he exhales her atoms into clouds; and Milton tells us that—

“She there, with humid bow,
Waters the odorous banks that blow
Flowers of more mingled hue
Than her purpled scarf can shew;
And drenches with Elysian dew;
(List, mortals, if your ears be true,)
Beds of hyacinths and roses
Where young Adonis oft reposes.”

We find, then, that this April queen, the goddess of showers, sheds her richness upon our sylvan cress, which, in return, starts up with vigour to meet the warm Spring showers from the mother rainbow. Ovid, too, tells us how this lady's messenger, Iris, visits with richness our earth, when she yields her treasures in brightness—

“When showers enlarged come pouring on the ground,
Then clad in colours of a various dye,
Junonian Iris breeds a new supply;
To feed the clouds, impetuous rain descends,
And bearded corn beneath the burden bends.”

The properties of this plant are indicated by its most well known name, “Hedge-mustard,” but is distinguished from the previous species by the appropriate prefix “broad-leaved.” It is also called London Rocket, from the curious fact, that it sprung up in great quantities on the ground which was laid waste in London by the great fire.

This burst of vegetation gave cause at that time for a lively discussion on the often refuted hypothesis of spontaneous vegetation; that is, of organic creatures coming into being without a parentage. All testimony, however, is against any such notion; every vegetable creature, whose continuance is within the reach of observation, is subject to the ancient law of life continuance, viz., it is an herb, or a tree bearing seed after its kind, a fact well expressed long since by Harvey in his notable motto, "Every creature is from an egg." This general statement does not go into the subject of buds or cuttings of plants, but merely deals with the production by seeds, as recorded by Prior, the poet—

"Just gods, all other things their like produce —
The vine arises from her mother's juice;
When feeble plants or tender flowers decay,
They to their seed their images convey."

The third native species of the genus *Sisymbrium*, is *S. Sophia*; so called by the ancients from the profound wisdom which a full knowledge of its medical properties indicated. This "Sophia" of ours has, like the word "sophist," one of its derivatives, declined much in dignity; for the honours of both are now held to be questionable and deceptive. It is a plant easily found on rubbishy waste ground; and, as Gerard says, "in the chinkes of stone walls in the mortar." It is an annual of about two feet high, with erect branches, and finely-cut leaves, so much so as to look somewhat like parsley. From this doubly-pinnatifid form of its foliage, it is called the "fine-leaved hedge-mustard." There is a whimsical

story also about the seeds of this plant—viz., that the force of gunpowder is increased by mixing with it a tenth of the weight of these little roundish grains. The value of this discovery most probably lay entirely with the rural retailer of ammunition. Several old receipts are to be found for improving gunpowder; perhaps the large coarse grain in which some of it was made up, might have had a facility of ignition given to it by mechanical dispersion, derived from saw-dust; but good powder seems best when most free from any admixture of foreign matter; and the little yellow seeds of our plant contain no very readily inflammable material. The last Irish species of this genus is *Sisymbrium thalianum*; this specific name is a “hard word,” which, though used by the botanists, seems to be unexplained by any one; yet the first observer who baptized the youngling, must have had a meaning for it; and as it is a plant very often met with, we too must associate an idea with the word, if we can. We try “Thalia,” but find no characteristic association with that muse; for, although she is described with a shepherd’s crook, and with her petticoats shorter than those of her eight clever sisters, we cannot claim her patronage for Thalianum, as the stalk of our plant will not do for the crook, neither will the small leaves of this *Sisymbrium* clearly represent the classical Thalian costume. Is the name derived from “Thalamus,” a marriage bed? Alas! it would not do; ours is, indeed, almost a wall-cress; Virgil tells us of a marble marriage bed, viz., “Marmoreus Thalamus,” ’tis true also that our little plant springs from lime

mortar when it is a little aged, and also from stone walls, yet this is a far-fetched origin for the name. Our last classical resource then is, "Thallo," one of the Horæ, equerry to the car of Flora, who presides over Spring; and as our thalecress produces her small white flowers in April, we will say she is named from the season of her being "brought out;" which fact is indicated by the above Greek word. In Holland it was once the pleasing practice to place a white rosette over the door where a birth took place. Madame nature stars our gateways, clay-banks, and old walls, with this tufty plant, to announce this season of millions of new births; choosing for her ribbon-like clustre of leaves, our country's colour, green, with slight red veins inserted in them, to produce an agreeable variety. We have little more to say about this plant, except to record the associations of the time of year, which feeling every poet has breathed, and those who have not sang have sweetly felt it. It is hard to select from the many praises of Spring which verse—ancient and modern—offers to us, we must limit our discursion, and adopting Anacreon's lines, transcribe the susceptibilities of that sweet singer of Græcia, as translated by our sympathizing poet Thomas Moore:—

"See the young the rosy Spring,
Gives to the breeze her spangled wing;
While virgin graces, warm with May,
Fling roses o'er her dewy way.
The murmuring billows of the deep,
Have languish'd into silent sleep;
And mark! the flitting sea-birds lave
Their plumes in the reflecting wave;
While cranes from hoary winter fly,
To flutter in a kinder sky.

Now the genial star of day
Dissolves the murky cloud away;
And cultur'd field, and winding stream
Are sweetly tissued by his beam.
Now the earth prolific swells
With leafy buds and flowery bells;
Gemming shoots the olive twine,
Clusters green festoon the vine;
All along the branches creeping,
Through the velvet foliage peeping,
Little infant fruits we see,
Nursing into luxury."

The delicious airs in the climate where Anacreon sung, breathe summer upon young spring so suddenly, that they almost seem to be one season, as the above sweet lines intimate; but our seasons come to us in a more staid and progressive course; we have full time to make acquaintance with Spring before Summer absorbs her; indeed, her fickleness at times makes every testimony of her sure arrival valuable. We must now claim a slight poetical record of our own Spring, from the heart and the pen of a lady; it is, of course, full of expressive description, and susceptible gratitude. Hymn by Mrs. Steele:—

"While beauty clothes the fertile vale,
And blossoms on the spray,
And fragrance breathes in every gale,
How sweet the vernal day!

"How kind the influence of the skies!
Soft show'rs with blessings fraught,
Bud, verdure, beauty, fragrance rise,
And fix the roving thought.

"Oh, let my wondering heart confess,
With gratitude and love;
The bounteous hand that deigns to bless,
The garden, field, and grove."

Our younger field-botanists should take care not to confound wall-cress with the *Draba verna*, which occurs more frequently, and has something of the same general form, while, like the present plant, it springs from walls and dry earth fences. Lastly, I have not discovered why our plant has been called popularly in England, "Turkey-pod." It is, however, very probable that its cress-like flavour may recommend it as early green food to turkeys, when turned out to range in the rather naked clay-paddocks which are close to farm-yards, and where the thale-cress often grows.

We next meet with *Erysimum*: it is a genus of cross-bearing flowered plants, named from "*Eruo-cio*," meaning in Greek, to cure or renovate; it indicates to nicety, and is, perhaps, the same joyous kind of word with our Irish "hoora;," surely no wonder, for if it produces by its mustard-like hotness such revivals as are attributed to it, the burning of the old Phoenix to evoke juvenility is nothing compared with pulverizing and preparing these seeds, which magical grinding, is said, makes old people young. We may then, indeed, make a free transposition of our *eruca* into *eureka*, and say, we have found it—that is when the *erysimum* is proved to be able for all the potency attributed to it by old authors.

Our first species of this wonder-working genus is *cheiranthoides* — the wall-flower-like hedge-mustard. Its leaf is nearly smooth like that of a wall-flower: it grows in waste places, dry corners of fields, on clay banks, and in hedges. It is about two feet high, bearing a small terminal

cluster of bright yellow petals, and also a series of single lateral blossoms, or small branchlets of flowers along the stalk. The little foot-stalks of the pods run nearly horizontally, and the siliques themselves, running upright, give a little of a candelabrum form to the plant when blooming in July. The yellowish-brown seeds are intensely bitter, and have been given as a vermifuge to children, with probably very good effect, from which property they were called worm-seed. The plant, though containing a cress-like acrid property, is eatable by cows, swine, sheep, and goats. And now for an extract from the legendary lore connected with our *Erysimum*. Its old English name is treacle-mustard. I have put my eye on a derivation of treacle; I have found that it means three times renowned, from the Greek words "*tri*," three, and "*kleia*," glorious. Think of this treacle eaters. The French and Dutch have a similar word, and the Latins had in use the Greek Theriaca among their medicines; from the Greeks it was adopted by early western compounders, and had a very grand place in their pharmacologias. Therion is a wild animal, which, with a termination meaning "sufficient against," was probably the constructive origin of Theriaca, which compound became a remedy against all injuries of a venomous or poisonous nature; or it might be derived from "Thero," which means to heal, and is also used to express to warm. Now, the seeds of the treacle-mustard are hot and stimulating. Our modern treacle, then, is a descendant of a very ancient family of syrups. Over sixty ingredients were compounded with

honey to produce this famous drug. Modern authors slight its antique fame; but the indefatigable Mr. Gray, in his "Supplement to all Pharmacopœias," gives the recipe in detail. This ancient treacle was named *Theriaca Andromacha*, because Andromachus, of Crete, Nero's physician, was skilful in manufacturing it. The Emperor Antoninus used it daily to prevent any possible poisoning from being malignant; so we see that incessant drug-drinking, and the practice of turning the stomach into an apothecary's shop, is not quite a modern invention, but that the hippish and valetudinarians had their own grand quackeries before newspapers existed to tell of "another wonderful cure" every post. This compound contradiction of medicated rubbish was also known as Venice treacle, because the Venetians, when traders with the world, had this article on sale for the convenience of the rich and the glutton, who, from the want of activity, suffered all the diseases of *ennui*. The treacle common, "the sperm of sugar," as Lord Bacon calls it, has more meaning in it. We exclude the fifty-nine helps to its usefulness, and along with them our treacle-mustard; and so passes away one of the glories of the herb-garden, while we keep our dark syrup as a wholesome, but coarse, substitute for sugar.

Our next *Erysimum* is the *Alliaria*, the onion-flavoured hedge-mustard; this is a property which will discover it to any one who can smell. It is also called Jack o' the Hedge, I suppose because the old Law has it that "Jack will never be a gentleman," and that the *haut-gout* of his garlic-

like breath can be perceived, even when he is lurking by a hedge-bank, in the smell-exhaling weather of May and June. The appearance of this plant is easily recognised ; it is about a foot or eighteen inches high, looking somewhat like a wild turnip, but the leaves are quite smooth. It has a stoutish flower-stock, with the seed-pods set on to their foot-stalks, almost at right angles. The blossoms are small and white. The heart-shaped toothed light green leaves turn a pale yellow long before they wither ; and, from their garlic-like taste, used formerly to be eaten as a relish between two slices of bread. This taste, says Mr. Sowerby, seems to be the quintessence of the acrid flavour peculiar to the odoriferous plants heightened into that of garlic ; from their pungency it used to be called "sauce alone ;" it was a *ne plus ultra* : nothing more acid was required. This sauce alone, however, would, by the more refined palates of our times, be sauce left alone : strongly odorous condiments being now to many persons odious. Other persons, too, who are charitably attentive to their neighbours' repugnances, avoid alliaceous vegetables, with a view to spare more delicate olfactories, therein following Bottom's judicious advice, to "eat no onions nor garlick, for we are to utter sweet breath ;" which care would enable the speaker, in Quince's phrase, "to be a very paramour for a sweet voice."

It has been noticed in the remarks on another stimulating vegetable, that our fresh, juicy, wholesome meats, do not now require the artificial digesters which were necessary in the days when

old salted oakum, known as store-food, was in use. Those who want truly to enjoy the pleasures of food—and it is, within proper bounds, one of the most lawful, as it is the most universal, of pleasures—should, by simple living, keep the powers of taste susceptible. Gluttony and excess defeat the natural excitement of good appetite, and destroy the zest of hunger, that most inviting sauce for the healthy; forcing the palled palate to appeal for a feeble sensibility to the incongruous sauces and violent spices which are used to awake the dull perceptions of the habitually exhausted *gourmand*. Without, therefore, deserting that part of our structure which marks mankind omnivorous, we should remember, in our indulgence of variety, not to satiate or abuse our palatial powers. Milton tells us of the refined luxuries prepared by the mother of mankind, when she appeared as an entertainer of man and angels, viz. :—

“ On hospitable thoughts intent,
What choice to choose, for delicacy best.
What order !—so contrived, as not to mix
Tastes, not well joined, inelegant; but bring
Taste after taste, upheld with kindest change.”

In the judgment of our grandest poet, such refinement in the arrangement of food was worthy the consideration of Eve herself. At a paradisiacal banquet everything should be fitting the high order of guests who met Adam at table: it was not enough to satisfy the cravings of hunger alone,—pleasurable sensations were also to have been secured by the viands produced. To this day popular adage tells how “the liquid mouth” pre-

pares to receive our nourishment; and it is one of our daily enjoyments, that perfect digestion commences even at our very lips; a circumstance which Milton epitomizes perfectly :—

“Taste, concoct, digest, assimilate,
And corp’ral to incorporeal turn.”

Intimating that the mind itself receives a character from the elegance and delicacy of our food.

CHAPTER X.

GOLD OF PLEASURE.—GOLD AS A CURE FOR MELANCHOLY, AND
ROCK-ALYSSUM. — WART-CRESS. — PROCUMBENT DITTANDER.—CO-
RONE, THE TALE-BEARER.—SHEPHERD'S PURSE, AND LADY'S
POCKETS. — PEPPER-WORT. — COARSENESS CONTRASTED WITH
SWEETNESS OF DISPOSITION.

PURSuing our tour through the tribes of cross-bearing flowers, we come to the genus *Camelina*, so called from the Greek "*chamai*," near the ground, and the Latin word "*linum*" flax. The name, humble flax, is not descriptive, seeing that it is much more robust than the common flax—the plant of which this is said by some authors to be the diminutive. *Camelina*, on the contrary, grows fully three feet high; but being, when found among flax, a weed, it reduces the value of the crop, and thus "humbling" the flax, it may be commercially designated the *chamæ-lina*. We have but one species of this genus, the *Sativa*—that which is SAT, or cultivated. *Camella* (which is the Latin for a caudle-cup) would not be a bad help to make us remember the vase-like seed-pods of this plant. Like all vegetables which are long known, and which have been put to general use, this enjoys a world of surnames, each being intended to convey some point of character. *Myagrum* begins its denominations, "*myia*," being the Greek for a fly; "*agra*," to capture, which alludes to the honey-like smell of the flowers, and their attraction for flies. This name is now appropriated to a genus which

is a native of France ; but the property recorded, when applied to our native myagrum, indicates its applicability, when in flower, in affording honey for bees. Thomson, our British Virgil, alludes to the bee and her mellifluous labours in the meadows and flowery fields pleasingly, when he says—

“ Nor is the mead unworthy of thy foot —
 Full of fresh verdure, and unnumber'd flowers ;
 The negligence of Nature, wide and wild,
 Where, undisguis'd by mimic art, she spreads
 Unbounded beauty to the roving eye.
 Here their delicious task, the fervent bees,
 In swarming millions, tend : around, athwart,
 Thro' the soft air the busy nations fly,
 Cling to the bud, and, with inserted tube,
 Suck its pure essence—its ethereal soul ;
 And oft with bolder wing they, soaring, dare
 The purple heath, or where the wild thyme grows,
 And load them with the luscious yellow spoil.”

But if our Greek and Latin combination is humble, our English term for this plant is superb. “Gold of Pleasure” is not small change in our botanical treasury. Our quaint and learned Burton, among his remedies against heroical love-melancholy, recommends gold, because of its beauty, as a cure. He says, “Gold, of all others, is a most delicious object—a sweet light ; a goodly lustre it hath ;” and in proof of its tonic qualities, he quotes St. Austin, and continues by saying, that “the sight of gold refresheth our spirits, and ravisheth our hearts ; it so revives the spirits, and is an excellent receipt against melancholy”—

“ For gold in physic is a cordial ;
 Therefore he lov'd gold in special.”

This quaint wit, however, gives his laud upon gold in a double sense; and so, probably, must we when dealing with the designation of the vegetable "Gold of Pleasure," for its oily seeds have been made a source of considerable profit, whence may have sprung some of the approbation indicated by its very laudatory name.

Our old friend, Gerarde, tells us, that "Dioscorides saith the roughness of the skin is polished and made smooth with the oylie fatnesse of these seeds; also, that Ruellius teacheth that the juice of the herbe healeth ulcers of the mouth; that the peasant doth use the oyl in his banquet, and the rich for his lampe." As an agricultural plant it has not been much cultivated in Ireland; nor, since grain crops have had such a predominant profit, was it much sown in England. We observe, "pure Colza oil imported directly from France" in the advertisements of chandlers; it is manifest then, that if attended to, a market for the oil exists at present; and, consequently, this vegetable may, with other new or revived crops, gain agricultural notice. Its value is enlarged on in the Flemish husbandry of "The Society for Promoting Useful Knowledge," page 51, where, among other recommendations, it is stated that it ripens its seeds in the short time of three months from the time of sowing; on this account it may be sown in Spring, where rape or any other crop has perished during the Winter.

In taking leave of our gold-flowered vegetable, we may notice, that when it was figured in the English Botany it was called *Alyssum sativum*, but since the publication of the old edition of

that work, *Alyssum* has been restricted to a genus of which we have not a species in our Irish flora. There is a species, however, known in our flower-gardens which invites a word on its merits ; it is the well-known *Alyssum saxatile*, or Rock Alyssum, a hardy pretty flower, which grows well on dry fences or stony places, and is an excellent rock-plant. Its learned name is derived from *a*, to deprive, in Greek, and "*lyssa*," rage ; it took away anger ; and so, indeed, ought all pleasing objects. Its common English name, Madwort, was of the same import ; it removed anger, which we all know is a temporary insanity. Now, any plant which can charm away that demon, we must cherish ; and instead of "stamping it in a mortar, and braying it with sugar," according to the old wife's prescription, let us stamp the fact sweetly on our minds, that anger and passion are poisonous to human nature.

Coronopus is the next genus which demands our attention : its name is not *Corona opus*, the crown of the work. No ; to attain the summit of this plant's history will take much time yet. It is so called from the branchy palmate form of its structure, resembling somewhat a bird's foot, and the leaves being again divided in the manner of toes ; its designation in the Greek is "*korone*," a crow, and "*pous*," a foot, which combination reminds us of our former friends, the *Ranunculaceæ*, or English Crow-foots. We must not again directly translate the Greek here, but, to prevent a duplication of names, retain the generic title, in Latin, *Coronopus*. Our first native species is *Coronopus Ruellii* ; for which appellation we

have not met any cause assigned. We find, however, that a botanist, whose name was Ruellius, translated *Dioscorides* into French; and it is probable that the species was thus designated to his honour. It is a low and very procumbent plant, of a vivid green colour in both stalk and leaf; its inconspicuous white petals are almost lost in the green clustering calyxes which surround them. Its seed-vessel is a small kidney-shaped pouch, which is flattened in its form, but crested with elevated sharpish points; the name of Wart-cress is appropriately given to it from this structure. It is found very commonly by road-sides and in stony waste places; it seems much attached to limestone, gravel, or chippings as a home; and from June to September may be smelled before it is seen in recesses among rubbish. It has a very active flavour of the mustard and cress character—every part, seed-pods and all, partaking of it. It is called also Swine's-cress, either because of its rank acidity, or because pigs eat it, which, indeed, is not improbable, as these animals seem now and then to indulge in stimulants, and grub and gravel for them at the way-side, but without detracting from their porcine dignity as much as men do from theirs when they wallow in low excitements, and, by such beastliness, place themselves on a level with the meanest of the sty-born swinish multitude. We must now take leave of this crawling offence to our noses; if we trample it, its garlic *haut-gout* molests us, especially so in hot dry weather, when its pungent vapour seizes on our eye-lids and makes them smart, in revenge for our slow sight

not having noticed it hiding in some corner on lime-stone rubble. Shakspeare picked out a human prototype of the Wart-cress in one of Sir John Falstaff's tattered recruits, as follows :—

Sir John.—Is thy name Wart ?

Wart.—Yea, Sir.

Falstaff.—Thou art a very ragged wart. His apparel is built upon his back, and the whole frame stands upon pins.

Shallow.—Ha, ha, ha ! You can do it, Sir ; you can do it. I commend you well.

The other native species of *Coronopus* is *Didyma* ; from "*didumos*," twins, because the seed-pouches, though twain, are yet "twin brothers, whose residence and birth scarce is dividant." This is the procumbent Pepper-wort of old gardeners, and is very like the preceding species, except that it is altogether a more humble plant. It is found in plenty on clayey banks and road-sides ; Professor Hincks gathered it in two localities in Cork, viz., about the Lough, at the south of the city, and in the neighbourhood of Clark's Bridge. It flowers in July, but its herbage is its most guiding feature, and its double seed-vessels the most individualizing characteristic. Linnæus notices its near relation in this last part of its structure to *Cochlearia* ; old authors called this plant *Procumbent Dittander*, which is, probably, a diminutive of the Latin "*ditio*," power, a term which we are familiar with in the structure of the English word "addition ;" otherwise we may derive Dittander from "*dito*," to enrich or increase,—our adopted word "ditto" being thus used,—the vegetable we are speaking of having had, in old cookery, fame as a powerful

stimulant, and an "enriching corroborative." It is not easy to find poetic notices of mere meat garnishes; their story is somewhat culinary, and consequently independent of such imaginative recommendations; yet their latinized name *Coronopus*, reminds us of Coronis in Ovid, to whose fate we may dedicate our flower, and some of the poet's verses. This lady was the daughter of Coronæus, King of Phocis, she was beloved of Apollo, but even to a god ladies will sometimes be fickle; she encouraged a rival, and Apollo's pet raven told him of it.* She lost her life and her love, but the raven, for his tale-bearing, was turned from white to black for ever; he was warned by the daw to hold his tongue, but he was too vain of being master of a secret to be retentive, and to show how rich he was, he whispered his scandal to Apollo. The daw told him her own sad tale, to induce him to keep his "prating tongue" quiet, but in vain; she urged on him, that Minerva had severely punished her for her tittle-tattle; and surely real female wisdom could never endure scandalous detraction or permit a whisperer of secrets in her presence. Just imagine a prating, espying lady, whose name was Corone, and of course a relative of Coronis, having her fairness turned into blackness, because of her invidious whisperings, and of her being obliged to wear the odious nickname of Corvus in addition, so that when she is now seen on her old haunt, the sea-beach, she is known as the

* Ravens have long screamed in unhonoured obscurity, but Dickens has again given them a place near poetic inspiration. His raven belonged to our modern Apollo.

"*corvus-corone*," or carrion-crow. That fair lady who once could whisper other people's love-secrets, is now condemned to caw and creak, marking how odious is the voice which has dealt in scandalous insinuation, or in exaggeration of harmless trifles into injurious offences and jealousies. The daw's warning we quote; for, says Ovid—

"The daw gave honest counsel, though despis'd,
And tedious in her tattle; thus advis'd,
Be thou no tell-tale, for I think my wrong
Enough to teach a bird to hold his tongue.
But you, perhaps, may think I was remov'd,
As never by the heavenly maiden lov'd;
But I was loved, ask Pallas if I lie;
Though Pallas hate me now, she won't deny:
For I, whom in a feathered shape you view,
Was once a maid—I vow my story's true;
A blooming maid, and a king's daughter, too.
A crowd of lovers own'd my beauty's charms—
My beauty was the cause of all my harms;
Neptune, as on his shores I went to rove,
Observed me in his walks, and fell in love;
Swift he pursued, I ran along the strand,
Till spent and wearied on the sinking sand,
I shrieked aloud, with cries I filled the air,
To gods and men, nor god nor man was there.
A virgin goddess heard a virgin's prayer,
For, as my arms I lifted to the skies,
I saw black feathers on their whiteness rise."
I strove to fling my garment on the ground—
My garment turn'd to plumes; and girt me round—
My hands to beat my naked bosom try,
Nor naked bosom now nor hands have I.
Lightly I tripped; nor, weary, as before,
Sunk in the sand, but skimmed along the shore,
Till rising on my wings I was preferred
To be the chaste Minerva's virgin bird;
Preferred in vain! I now am in disgrace,
Nyctimene, the owl, enjoys my place."

Rambling abroad to observe plants, it may be excusable to notice a bit of bird history; perhaps,

then, the extraneous and discursive interpolation just inserted, and its moral, must be accepted. We see in the story, that the once snowy daw became foul and dingy by indulging in envyings and whisperings, her appetites being prepared for the meanest garbage; the goddess of wisdom repudiated the uncharitableness she betrayed, until seeking, with anxiety, every low and disgusting thing, the carrion bird is now the punished "*corvus corone*;" this name at length brings us back to take leave of the genus *Coronopus*, which being mostly acrimonious, biting herbs, may well be devoted in deprecation to Discordia, the goddess of envy and maliciousness, and offered for ever to her as "scandal-wort," chosen to avert the deadly poisons of tale-bearing, and scandal-mongering.

The next genus of cruciferous plants, *Capsella*, is very indicatively named, being called so from its seed-pod, which is a little coffer or capsule. It was formerly united with the genus *Thlaspi*; and as that name has long been associated with it, we must stop to say that it was very appropriate; describing, as it did, the flattened sides of the seed-pods, which idea was early intimated by the Greek word *Thlao*, to compress. This is one of our commonest weeds, and shows its insignificant white flowers during all the Summer months. It is a thick spreading weed in the furrows of corn-fields, turns waste clay-banks green at their bases, and, indeed, is a most universal Rambler in all arable grounds. It is hardly necessary to seek it by means of its leaves. The *Capsella Bursa-pastoris*—the pasturer's purse, or bourse of the

French—cannot be mistaken. The very variable height and robustness of this plant might lead to the idea that a three-inch specimen was a different species from that which is two feet high; but this difference is merely the result of its being stunted for food when young—say during its struggle up through the gravel of a court-yard, as compared with its flourishing facilities among the rich pabulæ of a potato trench; and, by the way, let me remind the reader that the nourishment of the infancy and youth of plants determines for ever their bulk and vigour. In this fact, like to animals, and to man himself, it is very hard to conquer the diminishing effect of an early starving. The widely-sawed edges of the leaves are remarkable; but it is still more worthy of observation because less common, that the root, when recently pulled up, has a smoke-like smell—a *fume de terre*—like our common fumitory. The *Toy-wort*, or “false-pocket,” has its broad bag-part uppermost, as it were, supported instead of being suspended by its string: some pockets are made to retain their contents; but this, on the contrary, is constructed so that when the little yellow disks within are ripe, the purse shall open, and, instead of preserving, scatter its treasures. Thus, enough of the seeds reach the ground in spite of the birds, who are fond of them.

“*Propos* to pockets,” what an inviting discussion on this subject solicits me out of my road. The battle of the pockets has always figured in the integumental history of the *first order of the mammalia*. In our earliest time the song says that—

"Madam Eve, who was straight as the sticks of sky-rockets,
First brought up the fashion of wearing no pockets."

And we find ever since that time controversies about wearing them, or leaving them off—what size they were to be, where they were to be worn, &c. &c. The lady Fashion is fond of extremes; and we find accordingly that the pockets in the time of the Irish patriarchirate—that is to say, of the fourteenth century—were great open sacks, worn in front, and decked with the gayest colours. On old tombs may still be found many a Bhan Tierna bearing such a satchel; and it is probable that the hitherto unexplained line—

"Pray visit Cork with your pocket before you,"

has an ancient Celtic origin, and records the article of costume alluded to. But we must not dwell too lengthily on the history "long pockets;" they have taken their place importantly in all time. Mr. Shandy discussed them carefully when he was decisive that his son Tristram's breeches should be sustained by hooks and eyes. Even our sentimental bard, Moore, treats of them, and tells us that—

"Ere times and morals both grew bad,
And yet unfleec'd by funding blockheads,
Happy John Bull not only *had*,
But danced to money in both pockets;"

which proves that they were full free, and the coin could clink in them. We might quote largely on the particulars of pockets and purses, from Dame Fortune's own silken net down to the empty silique which a prudent Pope once gave to a boasting alchemist. We might remember us of the Lord Chancellor's *marsupium*, notorious for

- 4 its intolerable swallow, by which lands, houses, and gold are ingulphed, but is now somewhat less dangerous to the community since the Incumbered Estates Commission has laid a hand on that maw. We might;—but we must return to our plants, and point to the fact, that they are in this family much under pocket-law,—long and short pockets mark the great divisions of the *Tetradynamia*, *Siliqua*, and *Siliculosa*; the long purse and the little one having been chosen by Linnæus to distinguish his cross-bearing community of flowers; as it is in the world among men some bear crosses on sceptres, they possess great siliques; while others carry their crosses on pilgrims' staves, bearing through the world their bag, but often a little one—a truly siliculous and very limited purse; and so ends my chapter on pockets. In conclusion, the qualities of our *Capsellæ* are those of the milder *Tetradynamia*, and though it is the true *Thlaspi* of Dioscorides, it has no pretence to value as a medical herb.

The genus *Lepidium* now invites our attention; so called, some authors say, from "*lepis*," a scale, the little seed-pouches resembling small fish-scales. Withering says it is so named, because it is of an anti-scorbutic group of plants, useful to remove leprosy and scaly diseases of the skin. The general stimulant character of this large family has been noticed by Professor Tilley, at the Cambridge meeting of the British Association in 1845,* which statement being a recent account of their properties, is fitly abstracted here. He says, cruciferous plants are taken as condiments, in conse-

* See Miscellaneous Communications, page 35.

quence of a stimulant oil which they contain; and it is interesting to find that sulphur, combined with other chemical substances which are found in the oil of mustard and in the oil of garlic, is also the organic radical material of oil of assafoetida, which odorous seasoning is much used in India as a condiment. Sulphur, in all its forms, is a specific against cutaneous diseases; and our *Lepidiums*, from their chemical composition, may be considered *Lepifuges*, or dispersers of scaly diseases. A long list of maladies which are produced in our countries by dirtiness, bad air, and unwholesome food,—their mischiefs reduce the physical and moral tone of those who suffer from them, and the healthy perception of all the senses is damaged. We know that a scaled skin indicates the low perceptivity of a fish or a reptile, and a degradation of moral apprehension has always been associated with this obstruction between the outer world with the inner intelligence of man. Thus, we have Spenser describing a base character as associated with cutaneous filthiness :—

“Her crafty head was altogether bald,
And, as in hate of honourable eld,
’Twas overgrown with scurf and filthy scald.”

Shakspeare uses “scall,” or scaled, in the same sense; and Dryden applies scurfiness as indicative of moral defect, when he says—

“They are happy, when by length of time
The scurf is worn away—of each committed crime
No speck is left.”

It is almost whimsical to remark further, that one of our most recent vulgarisms points out in-

tricity and deceitfulness as being similarly demonstrated: he is an artful, mean rogue, is conveyed by saying, "he is a scaly fellow."

Our first species of this genus *Lepidium* is *latifolium*, the broad-leaved kind. Its common name is Broad-leaved Pepper-wort; it has the acrid quality proper to the whole group of plants. In wetish shady places near the sea, and in salt marshes, this robust perennial is to be found. Its aspect is somewhat like a middle-sized horse-radish plant; and its pungent roots have been used as a substitute for that condiment, deriving from thence its name of poor man's pepper. In July the small white flowers appear, but so plentifully on the blossoming thyrsus as to be very conspicuous. An infusion of the leaves is emetic; and from this action was formerly, probably, truly considered to be a means of relief in cholera.

The second Irish species of *Lepidium* is *rudemale*, because it grows in rude coarse places, most especially on ragged rocks near the sea, the Latin word for rubbishy being *rudus*, and in such places this scale-wort finds a natural home; it is thus called after its nurture; rusticity, however, is one thing, and rudeness quite another. Humble station and rustic habits may forbid the ineffable facilities of true kindness as it is polished by good society; but good nature, in the most rusticated individuals, can be perceived as a refining and cordial sentiment, while assurance, though it be London assurance, can be vulgar with the activities of

"Uncomely courage, unbecoming skill."

Position alone is no cordon against want of refinement. The city rich ones at times are worse than rustical, and fall into the intolerable vulgarity of "swilled insolence;" on the contrary, observe,

"But as the sun's refulgent light
Heav'n's wide expanse refines,
With sovereign lustre through the soul
Celestial sweetness shines.

"This mental beam dilates the heart,
And sparkles in the face;
It harmonizes every thought,
And heightens every grace.

"One glimpse can sooth the troubl'd breast,
The heaving sigh restrain;
To sickness' couch it comes with rest,
And soothes the sufferer's pain.

"Beneath its bright auspicious beams
No boist'rous passions rise;
Moroseness quits the peaceful scene,
And baleful discord flies.

"A thousand nameless beauties spring,
A thousand virtues glow,
A smiling train of joys appear,
And endless blessings flow.

"As when the blooming Spring returns,
And cheers the wintry plains,
O'er earth, and air, and human hearts,
Ethereal sweetness reigns."—

Abridged from Robertson.

Our "rudesby" of the Bohereens sometimes springs from the mud, and bears with it the vulgarity of its nature unamended. It is a coarsely tasted vegetable, with a foetid fox-like smell when bruised; its flowers are yellowish, white, small, and inconspicuous, appearing in June. The young botanical physiologist will observe in this inflor-

escence one of the instances of seeds being perfected without the blossom-leaves or petals which are so generally displayed on the festive occasion of the birth in plant progeny. Instead of this coloured drapery, we have sometimes only a white-edged calyx, yet the seed-pods are plentifully ranged on the stalks, which is usually from six inches to a foot high. The seed-pouches are double, and are adherent to one another with a conspicuous line of junction. Our plant is also popularly designated from the shape of its leaves, which are more slender than those of the previous species, and is consequently known as the narrow-leaved pepper-wort. This vegetable was formerly added to the list of our peptic-worts—the concoctive or digestive salads—which were made to garnish the coarse animal food of other times. It is rather probable, however, that no wise or tasteful “kitchener” would, in our day, put the eating of it among his peptic precepts.

CHAPTER XI.

MITHRIDATE PEPPER-WORT.—THE FINISHING CURE.—SMOOTH PEPPER-WORT.—WOAD; HOW A GOOD TEMPER SMOOTHS THE SKIN.—DYING BLUE.—PICTS.—THE RAPE PLANT, RAPE OIL, ETC.—BIRD SEED.—CAGED BIRDS.—STERNE AND THE STARLING.—FREEDOM AN UNCONQUERABLE DESIRE IN OUR NATURES.

RESUMING our history of the Scale-worts, or Lepra-fuge cresses, we come to *Lepidium campestre*, an inhabitant, as its name declares, of the *campos*, the open field, where it flourishes in clayey or gravelly patches of ground. This word, *campestre*, was used among the Persians to describe the "shorts," as tailoring affectations name them, which wrestlers wore when engaged in the struggling and straining of public athletic contests. The bi-pouched seed-pods of this plant have somewhat the form of that compact garment; and Linnæus, who was stored with images from the classical dictionary of his memory, had, very probably, the secondary meaning of *campestre* in his mind, as an additional fitness in the surname he conferred on this *Lepidium*. This cress is a robust plant, with the stalk-leaves halbert-head shaped, and jagged on the edges. It is a foot or more high, and catches attention by the hoary pubescence on the whole herb. The thlaspi-formed seed-vessels lead readily to its generic place; the flowers are in small corymbs, with whitish petals. It is rather an unfrequent plant in Ireland, but is met with sometimes in potato trenches, or corn-field sides. There are some structural

varieties described by botanists, but these differences must be examined in systematic works.

This species has various names; one is the cow-cress—probably cows have been seen to crop it. It is also called Mithridate pepper-wort. The story of Mithridates and his medicinings has been told before in the description of the Mithridate mustard; nevertheless, a case of modern “domestic” medicine, which is better than Buchan’s, may be worth insertion here:—A re-married widower once called on an acquaintance of his, and having produced a phial with some brownish-looking syrupy fluid in it, said—“You, sir, are a chemist. For mercy and goodness sake tell me what is in this bottle.” The reputed chemist said—“Really, I do not know. Give me some help. Is it animal, vegetable, or mineral?” Ex-widower replied—“I don’t know; but it was *the cure* my first wife took when she was sick; and as the present mistress is poorly, I was just thinking it might cure her.” The chemist replied indignantly—“Take care, sir. Do you want to get me into a conspiracy to poison your wife? Be off with your bottle, this instant.”—“Dear sir,” continued the widower, “what did I say? I am sure it was a very skilful lady who made up the bottle for my first wife. I am sorry you are angry at it, and so must bid you good-bye.”

We see from this modern instance that, perhaps, the King of Pontus long ago, being a learned man who spoke twenty languages, although he poisoned his Queen, may have only been trying a cure on her, like the lady-leech of our day, and her agent the ex-widower.

The last species of this genus is the *Lepidium Smithii*, of Hooker, called the "Smooth field pepper-wort," because its seed-vessels are glabrous, but which slight circumstance is scarcely sufficient cause for involving smoothness in its name, while nearly every other part of the plant is hairy to such an extent, as to be described by Sowerby and others as *Thlaspi hirtum*, or the hairy Mithridate mustard. This kind of a *lucus*, almost *non-lucendo*, often occurs in description, from naturalists treating some one fact as essential, and passing by unnoticed others which are more popularly within the reach of observation. This *Lepidium* grows from six to eight inches high, in the borders of fields and of hedges, showing its whitish flowers with brown stamens plentifully in June and July. When its stalk and leaves only are attended to, its aspect is not unlike that of a small white rocket, being a somewhat suffruticous or shrubby plant. Its downy pubescence, and comparatively conspicuous petals, distinguish it well from the *Lepidium campestre*. This cress also was one of the spices of our country before we received the more pungent kinds from India; thence come spices for fiery liquors in our days—

"Cinnamon and ginger, nutmegs and cloves,
Wherewith to engender a jolly red nose."

Burton, who anatomized melancholy, or the "black choler," pronounces that "spices cause hot and head melancholy," and forbids them to studious persons, particularly to melancholy schoolmasters, believing such things to be corrosive, being hot and dry "in the first degree." As the

old pharmacy says—spiceries ought to be moderately used, because they often disorder the concoction, having an effect like the over-roasted meats on Petruchio, who tells us—

“For it engenders choler, planteth anger;
And better ’twere that both of us did fast,
Since of ourselves, ourselves are choleric,
Than feed it with such over-roasted flesh.”

Indeed, experience has shown to all close observers that simplicity in food is the best, that stimulating the palate perpetually makes it callous, except to drastic excitements;—

“And that though we with pepper may heighten the savour,
We thus ruin our taste for each delicate flavour.”

Isatis, the next genus of “cross-works,” is so called from the Greek word *Isazo*, to smoothen. Its long leaves are glabrous, that is, very smooth; and they were believed to induce a similar smoothness in the skin by their mere application. The leaf has no malign juices in it; so that, in the attempt to smoothen cuticular rugosities, if it does no good, it will do no harm, except by leading people into the lazy doctrines of remedies, which abstracts them away from the better method of preventing evils, either corporeal or mental, from afflicting them. A well-regulated temper does much to insure for the skin its true velvety pliancy and smoothness; while an irritable disposition or habit turns the cuticle the wrong way, like “Quills upon the fretful porcupine.” I knew a peevish, ill-conditioned old gentleman, whose “bad humours” took at last the unpleasant form of a tetter on his shoulder. His surgeon was

once asked how the patient was ; and, mark, his patient was then moving about pretty stoutly. "Oh," said the doctor, "I shall never be able to cure him. He has such a malignant temper, that this will be a morbid sore, I fear, to him. And so it turned out ; the little boil became a carbuncle, and the irritable man's health was broken up, so that he never recovered. Our old poets, Beaumont and Fletcher, give cheerfulness the pre-eminence due to it as a restorative and tonic, in this song of "merrie thought," from one of their plays, viz :—

"'Tis mirth that fills the veins with blood
More than wine, or sleep, or food ;
Let each man keep his heart at ease,
And he scarcely knows disease.
He that would his body keep
From distempers, must not weep,
For whoever laughs and sings
Never he his body brings
Into fevers, gout, or rheums,
Or ling'ringly his lungs consumes,
Or meets with aches in the bone,
Or catarrhs, or griping stone,
But, contented, lives for aye ;
The more he laughs, the more he may.

Burns says, figuratively, we ought to "stroke people cannily, and with the hair." It is absurd to apply the smoothest lubricants to the skin, except the mind be bright and lustrous ; indeed then, and without the leaves of the *Isatis*, the body will be beauteous and translucent. The specific distinction of our plant is *tinctoria*—the tincturing or staining species. This plant is very unlike the group it belongs to, resembling much more one of our large native *Asters* than its own con-

genera. Linnæus considers it a maritime plant; and so are the half shrubby composite herbs which it resembles. It grows about two feet high, and in July shows its golden yellow thyrsus of blossoms. The seed-vessels are of a dark brown colour. It is now entirely a cultivated herb, so much so that the specimens found wild may well be charged with having strayed away from the farmer; and yet, it seems generally admitted to have been the source of the blue dye formerly used by the early Britons. They were not transplanters, so that it can hardly have been a plant introduced by the aboriginal pictorial people, whose love of colouring went beyond their love of covering; and who, scorning the mineral jewels, studded and streaked their skins with

“Dints and lines of evening’s tinct,
The purply streaming amethyst.”

Our dyestuff vegetable stands alone, distinguished among its numerous family by the remarkable property of yielding a blue pigment. Old Salmon, the herbalist, bequeaths to us a rather extemporaneous method of developing this characteristic: he tells us to take the little tongue-like “pods wherein lye the seeds, and chew them, so as to be broken with moisture, and they will give a blew color.” The common economic method of producing this colour is much more comprehensive. The leaves are mashed up, and a process carried on which is described in works on dyeing its details, which it would be inconveniently long to transcribe here. The account given of this plant in *The Entertaining Knowledge*—article, “Materials for Dyeing,” is good, and may

satisfy general inquirers. There is also a copious notice of it in *Withering's Botany*, describing its culture, and giving manufacturing particulars. The woad dye, though in itself not beautiful enough for our tastes as a colour, is the best foundation of depth in our permanent blues ; and we accordingly notice many of our manufacturers announcing that their blue cloths are "well woaded."

The word "woad" is the modern form of the Celtic *gwed*—bright, brilliant, or showy ; from which the Latins have their *gaudio*, to delight ; and from it the English of the Tudor times derived their phrase "gauds"—showy decorations, or jewels. Pliny translates this name by *glastum*—the blue dye-stuff ; from which Latin word old Gerarde says, and says in error, the Celtic name is "wrung out." Cæsar, in his "Fifth Book of the French Wars," saith, "That the Brittons do color themselves with woad, which giveth a blew color." The ancient Britons painted themselves with a pigment prepared from woad ; and their national name is said to be derived from the Celtic word *Bretho*, to paint. Many ancient writers give an account of the court costume of the Britons, which would indicate a fine climate in their day—equal, indeed, in mildness to Paradise itself ; or else it would point to a hardihood of constitution not to be believed on mere traditions. They tell us that the British wives and daughters despised all covering of the woof and web. Dr. Garth rhymes about them thus :—

"In times of old, when British nymphs were known
To love no foreign fashions like their own ;
When dress was monstrous, fig leaves were the mode,
And quality put on no paint but woad."

This story of the learned doctor, and those he copied it from, must, for meteorological reasons, be a slander; it is probable that with them, as with most uncivilized nations, painting was considered among the early British to be a great adornment; warriors of nearly all savage tribes paint themselves to excess; and many of the priests, who assumed to encounter more than earthly enemies, took trouble to make themselves savage-seeming and horrid at certain fierce sacrificial periods; as the Bacchi had also their Bacchantes, it is probable that women joined in the wild orgies of the northern parts of Europe, and then, in the words of an old writer, "The *glastum* was employed depicting the bodies of British wives and daughters, who thus, coloured all over, went naked in certain kinds of sacrifices: the frenzied and often intoxicate dancings of many pagan ceremonies leading the wildish people to break from clothings and all other decency." Historians say that the priests and higher orders of warriors and sacrificers had figures of the heavenly bodies well painted on the skin with this pigment, and that the Britons emulated the New Zealanders, and other intelligent savages, by the picturations on their bodies. The animals blazoned on them seem to have been aboriginal armorial bearings; a degree of dignity and distinction which the Irish Celtic stock, who never painted their naked bodies, are not recorded to have enjoyed at all. Thus, we see that the celebrities of every age have had some way or other of "starring" it; the pictorial people pigmented themselves with rosettes of what they, of course, con-

sidered "a lovely azure." At this fascinating contrivance, modern beauties would, no doubt, "look blue;" the priestesses of the modern boudoir, more tasteful than those of the ancient wigwam temple, have shifted the cerulean tint from the skin to the stocking; but the learning which once was among our women a kind of "lionizing," is now, happily, become very general, and blue-tinted hose are no phenomena; so much so that our poet Moore's taste is complied with, as suggested when he makes Mr. Hartington comment on Lady Bab's display thus:—"Learn as much as you please; I could bear a little peep at the blue-stockings, but save me from the woman who shows them up to the knees!"

The Latin name *glastum* under which Pliny notices the *Isatis*, is derived from the Celtic *glas*; the word intimates blue, green, blueish, or hoary green; the juice of the woad wearing on its surface a greenish hue, as, indeed, does the solution of indigo, with which this plant's colouring principle assimilates much in character. This old Celtic word appears in many combinations of our language; one such is glaze, which is usually attended by a glaucous or sea-green tint; glass too, itself, was formerly much more greenish, blueish, or opalescent than now, and from which circumstance its name was accurately descriptive. Topographically, the word *glas* for green is universal in Ireland; for instance, Baltin-glas, "the Baal-tin field or green;" Glas-nevin, "Nevin's-green;" Fin-glas, "the Fin's-green," &c. In Scotland, the same name often occurs, as Glasgow, "the goats' green;" and even in England,

the unextinguished and unextinguishable Celt still speaks from the soil, as Glas-tonbury, &c.

We now enter a genus of vegetables, *Brassica*, whose application, as good for men and cattle, gives to most of the species vast interest and importance. The writers on every portion of its history are so numerous and copious, that our descriptions must be a petty breviate, indeed; and, as this plentiful literary supply is everywhere accessible, we may be permitted to be more sparing in our quotations. The name *Brassica* is said to be derived from the Celtic word "*bressic*," a cabbage; and this derivation from our aboriginal tongue would naturally induce belief, that although a cultivated, and, of course, much modified, group of vegetables, we have always had several of them indigenous. Withering is not content to abide by our Celtic root, but must give it an Attic origin, and, consequently, he derives it from the Greek "*brazo*," to boil; the operation, no doubt, which is of most importance in making all the *Brassica* tribe useful, for vegetables have been vilified, and called causers of cholera, merely because they were but parboiled, instead of being cooked. The *Brassica* tribe of vegetables cannot be wholesome when merely sodden and rendered tough by hot water. This may be taken as an axiom at all times, and in all states of health; but when various modifications of intestinal susceptibility were endemic, as in our cholera visitations, food of any kind eaten half raw must have been mischievous; and thus such crude garbage brought a bad name on "garden-stuffs" in general.

Our first species of this genus is the *Brassica napus*, which specific distinction seems derived from the Saxon word "*knob*," "*knop*," or "*knap*," a lump or broken piece; the root being somewhat elongated, turnip-formed above the ground, although spindled below the earth. It is a cultivated farm vegetable, but strays into waste places and sides of corn-fields. It grows one or two feet high, and has smooth glaucous leaves; the lower of which are lyre-shaped and toothed, the upper long-heart-shaped and clasping the stem. The calyx is yellowish; and the small, but yet brighter yellow petals make some show in May and June. The pods are torulose, or like a string of beads, and are therefore remarkable and characteristic.

Like most cultivated plants which have their leading properties in common, the names of the species and varieties of the *Brassicæ* have been intermixed and subdivided interminably; gardeners have their catalogues of titles, agriculturists have theirs, and botanists secure to themselves variety in liberal amount. Minuteness is laudable, but those who seek its completeness, must go to Deecandolle and other able classifiers, leaving us to the more superficial and easy work of recording popular generalities. Our present plant, then, we describe as the *Rape* of agriculture; we find this word in the Greek, and in the Latin, on its way down to us, but no exact account has turned up of what it means as applied to our vegetable. *Napus*, the specific distinction of this plant, is represented by the English word "*nape*," and is taken directly from the Greek "*napo*," a hillock; we find this nomenclature demonstrated

by the collar or protuberant neck above the root and beneath the leaves of the *Brassica napus*, and this discovers to us the meaning of its old English name "*naphew*," "*naveau*" in French, or "*navew*" in more modern English works, which are the softened or vowel-sounding modifications of the above Latin word "*napus*."

The age of green crops in Ireland having been much forwarded by the free admission of foreign grain, we may expect to see a larger extension of *Rape* culture in our agricultural districts. It is known to do admirably on well-tilled clay soils, and yield a plentiful production in such situations. The examination of its value as a cattle-feeding vegetable belongs to the calculations and economy of farming; it is also universally known as an oil-producing plant, rape oil, derived from its seed, being one of our commonest articles of manufacturing use. Every work on husbandry, native and continental, notices the processes for growing *Rape* and preparing its oil for commercial purposes; one of the most summary and descriptive accounts is in "The Entertaining Knowledge—" volume, "On Vegetable Substances;" article, "Fixed Oils." The oil is known in France as Colza oil, where it is largely prepared, as it also is in Belgium and Holland. One thing appears in this account which is not commonly mentioned, viz., the stalks and waste of the *Rape*, when burned, afford much potash; a circumstance important to be known, now that the value of alkalies, as restoratives to the land, is generally appreciated. This vegetable was one of the old group of coleworts; but we shall

apply that name only to the cabbage species, as its use here would lead to confusion. One of the popular applications of the seed of the *Brassica napus* is as food for cage-birds. Rape is one of the bird-seeds well known to every keeper of feathered pets. When considering the question of those minor morals which have their effects upon our every-day feelings, the propriety of keeping caged birds has frequently been discussed. We all love liberty; should we, then, forgetting to do unto others as we would be done by, imprison our fellow bipeds, who, wearing feathers, resemble us in our sometimes plumery and gaily coloured finery? Sentimental Sterne has recommended this consideration to our passions very vividly in his *Journey*. With what feeling he commences his story:—"I was interrupted with a voice which I took to be a child's, complaining, '*It could not get out.*' I looked up and down the passage, and seeing neither man, woman, nor child, I went out without further attention. In my return back through the passage I heard the same words repeated twice over, and, looking up, I saw it was a starling hung in a little cage. '*I can't get out, I can't get out,*' said the starling." Sterne's effort to aid the bird's struggles carries our sympathies with it. He says for us, "I vow I never had my affections more tenderly awakened." He had recently been under-estimating the evil of imprisonment, even in the Bastille; but the bird's complaint was true to nature, and put to flight his theoretical sophisms, which he had imagined in mitigation of the misery of a prison. Then fol-

lows his splendid deprecatory apostrophe:—"Disguise thyself as thou wilt, still, slavery, thou art a bitter draught." The bird in the cage, he says, pursued him to his room, and he was going to figure to himself the miseries of imprisonment, as applied to millions of his fellow-creatures who endure it; but he limited his plan—he "took a single captive; and, having shut him up in his dungeon, he looked at him through the twilight of his grated door." Let any one who makes light of the punishment of imprisonment; who thinks it too mild an infliction on an offender, read Sterne's "Captive," see how slightly, intrinsically, his state differs from that of the captive of to-day, surely then he will know and pitifully feel what misery confinement brings with it.

But we must return from men to birds: how far is it wrong to keep them caged? The invitation to do so is founded on one of our most natural, nay, of our most amiable sentiments, viz., the love of nature's own children, and of holding intimate intercourse with them. It is easy for those who know the pleasures of rural life to understand the feelings which induce the town-prisoned artizan to keep cage-birds. Say we omit the eminent instinct which we all enjoy—that of adding to our group of perceptive beings who know us, and who love us—must we not sympathize with the poor shoemaker, who, if he cannot command rural sights from his garret in a lane, secures to himself rural sounds, at least, sharing his savings with his dingy black-bird, whose coat, it is true, wants some of its native gloss, but who still possesses his rich whistle

in perfection, with which he sometimes rolls and carols so loudly as to drown the beating of his master's hammer on his work? All we ask, then, for the feathered choristers is, that birds shall be selected who have not the instinct of freedom very strong in them; the sparrow's bold energies submit badly to confinement, and the half-domestic robin with a still worse grace changes his familiarity and confiding friendship in the garden for a prison, whence he "can't get out." Under the care of man, the linnet seems satisfied to extend his twitter into a song. The wood-lark, too, forgets that he is encaged, and cheerfully challenges your attention in unexpected town residences; but who would be so cruel as to restrain the characteristic instinct of the sky-lark in a cage, and there forbid to him his natural home, with

"The mountain nymph, sweet Liberty,
In unproved pleasures free,
Where the lark begins his flight,
And, singing, startles the dull night
From his watch-tow'r in the skies,
Till the dappled dawn does rise?"

The lady of cage songsters, however, is the canary; graceful in form, and of lively and tasteful coloured plumage, with fully reconciled and cheerful habits, she is well recommended to the lover of drawing-room melodists; but, with all these facilities for domestication, let us remember that "a small cage" was one of the prisoned starling's afflictions. Those ladies then obey humanity as well as good taste who give to these "primrose pets" a good-sized aviary, in which they can use their wings, and show their graceful movements

with effect ; their health and energy are improved by this exercise, and their melodious powers made more tonic and powerful. The canary, seems naturalized to our restraints ; she resembles Montgomery's imprisoned dappled doe, who,

“ All fire and life,
Trips along with gallant pace,
Her limbs alert, her motion grace ;
Soft as the moonlight fairies' bound,
Her footsteps scarcely touch the ground.
She happier than a queen appears ;
* * * * *
Free
From all the risks of Liberty ;
Born in a gaol, a pris'ner bred,
No thoughts of freedom plague her head.”

And now, surely, a good deal of chat has been made out of the words, “bird seed ;” but it must be excused—*Brassica napus* was rather a barren subject, if severely restricted from the free discursiveness of a rural Rambler.

CHAPTER XII.

TURNIPS : KNOWN TO THE ROMANS.—EATEN RAW AS FOOD IN THE TIME OF THE LAST IRISH FAMINE.—DEAN SWIFT AND THE STREET CRY OF “TURNIP.”—SEWERS AND CHANNELS.—CABBAGE : AFFECTION ABOUT THE WORD.—FIRST SPRINGING FROM DROPS OF JOVE’S PERSPIRATION.—PERCEPTION IN HEADS OF CABBAGE.

THE second Irish species of *Brassica* is the *Rapa*—the translated word has been already applied as the English name of the previous species ; this plant is also entitled to share in the manure-miser’s approbium as both the *Brassica napa*, the rape, and the *Brassica rapa*, the turnip, are gross feeders, and great consumers of the pabulum in soils. The fact of these vegetables being very voracious, was well known to early cultivators ; the Roman agriculturist, Columella, calls a bed of the *Brassicas* “rapina;” but whatever they carry off from the soil, they fully return to the horticulturist or farmer in a highly organized and applicable form. The common turnip is too well known to require description ; it frequently runs wild in the neighbourhood of garden and farm, and its glaucous perfoliate stalk, surmounted with golden flowers, is very familiar. The true root is the fibrous caudex which proceeds from that succulent globe beneath the leaves—the turned or rounded knop, from which our word “turnip” is constructed. The previous species, *Brassica napus*, as we have seen, has an elongated knop—a nape—which Gerarde says is like unto a great cucumber. Our present plant, on the contrary, has its vegetable

ivory turned into a ball, just beneath its rough cluster of herbage—a structure recorded in Gay's Sixth Pastoral, when Bowzybeus sings his rural cosmogony thus—

“Of nature's laws his carols first begun,
How turnips hide their swelling heads below,
And how the closing coleworts upward grow.”

The turnip is an orbicular expansion of the stem, a turned nip. The horticultural and agricultural modes of improving and adapting the vegetable for the various uses to which it is applicable, are to be found in all books of gardening and husbandry, making too large a literature for insertion here. The writers for the farmer and gardener having done their parts fully, this appendix takes up a less utilitarian tone, and seeks to amuse, while it is somewhat historical also.

Our potato famine has, very generally, introduced a greater variety of garden stock into culture; and, even as field produce, turnips are more generally raised than they have been. A rash and chance-medley confidence in our changeable climate, and in the ripening powers of our frequent cold and wet summers, has, for a series of deteriorating seasons, exposed our staple crop, which, in its best harvested condition, is a rather tender South American under-ground bud, to all the accidents of ill-usage. The potato, which with us is properly the subject of ten months' culture from the planting to the digging, has been driven by the hurried hazard of about half that period for its maturation. The debility thus introduced and made general, will, perhaps, take some time to be replaced by energy and vigour; but we saw

sad results during the visitation of the potato rot; hundreds of our people, for want of better food, devoured turnips as a principal part of their sustenance, and often raw too, having no means to purchase fire to dress them. In that state they were, no doubt, a mere stay against starvation, being very indigestible, and, as diet, very meagre and watery. I may give one instance, from among many similar cases of destitution, of the way in which the famishing often fed themselves:—

“A woman and her children were seen in a gentleman’s field devouring raw turnips; the owner was a magistrate; he inquired, ‘Are they putting them in a bag?’ ‘No,’ said his informant, ‘they are eating them.’ ‘God help them,’ said he, ‘I will not notice them; driven to devour my turnips raw, they are more to be commiserated than blamed.’” Even those who could buy this poor alleviation of hunger consumed them in every way, cooked, if possible, half-cooked from necessity, but, alas! entirely undressed when famine-hunger was ravenous and indiscriminate. Prudent cooks recommend turnip food to be mashed, and then stewed with milk, adding salt and spices to savour it; and, certainly, for those who have delicate stomachs, such a dish is both palatable and wholesome. Turnips were a part of the farmer’s food in Gay’s time. He gives a short national dietary, in his First Pastoral, as follows:—

“Leek to the Welsh—to Dutchmen butter’s dear.
Of Irish swains potato is the cheer.
Oats for their feasts the Scottish shepherds grind.
Sweet turnips are the food of Blouzalind:
While she loves turnips, butter I despise;
Nor leeks, nor oatmeal, nor potato prize.”

Turnips have been baked into pies and sweetened; roasting was also one of the old modes of dressing them for the table. Pope names this simple food of the Roman agriculturists, when he states how circumstances might have sent inordinate epicurism to browse on vegetables, viz :—

“ Lucullus, when frugality could charm,
Had roasted turnips in the Sabine farm.”

But turnips, when prepared without plenty of water to wash away their brassicacious twang, have an acridity of taste which is too coarse for modern palates; indeed, our old gardeners complain that these nips, when dry-toasted, “ did nip their eyes sorely; although being dried of their wateriness, they were more corroborative for the belly, and less flatulent therein.” Turnips used to be stored in the early winter; and we are told in an old work, “Peacham on Drawing,” that November month should be pourtrayed with bunches of parsnips and turnips in his hand. Sweet *Anne Page* must have attended the housing of some such winter stores, as we find *Master Slender's* ill-favoured faults suggesting a similarity between his visible mawkishness, and the unfeatured globularity of our vegetable. *Anne* prays—“ Good mother, do not marry me to yond' fool. Alas! I had rather be set quick i' the earth, and bowl'd to death with turnips;” but *Anne*, by being one of the “best discretions of a woman,” escaped this tediousness of a man. Our quaint historian of Irish vegetables, Threlkeld, gives us an extract from Blair's account of the rapid vegetation of turnip seeds, a precocity

common to them, and to those of many cruciate plants; this vivacity gives them an utility in producing readily a small salading where no better vegetables can be had—on board ship, for instance. Dr. Blair tells us that turnip-seed, sown in July, appeared above ground in three days; and in little over a month, one of these turnips weighed two pounds fourteen ounces. These observations were noted so long ago as the year 1702, but the great sized cattle-turnips of our agricultural shows are big enough to supersede the fairy-grown gourd of the ancient tale, and would almost answer for *Pouset* and his seven brothers to burrow into. Monster vegetables are common now; and giants from culture do not require the exaggerations of fable to describe them. Blair continues his "turnip tellings" by stating, that he has counted the seeds of this vegetable, and found that there were 1000 grains in one ounce weight of them. He also calculated that a vegetating seed's progress in accumulation was to gain 671,600 times its original weight of vegetable matter in six weeks' growth, which he divided into the following periods: it increased 11,193 times its weight in a week; 666 times its weight in every hour, and 11 times its weight in a minute. Surely, after this relation, the Irish description of active vegetation is scarcely hyperbole, when we say, in a lively spring-time, that we can "hear the plants growing." Perhaps we are not to bind our old author severely to his exact figures; but we know that these seeds grow amazingly quickly, when aided by shade and heat; that a kitchen

shelf makes a good hot-bed for them ; and a piece of well-wetted flannel, or any such retentive surface, supplies the place of a seed-bed.

Of these slight materials portable gardens may be made of all shapes and forms, resembling in little the clipped topiary works formerly so much the fancy in hedges, when pillars, cones, and columns grew greenly ; and paradisiacal figures of Adam and Eve were dressed with the tailor's shears very extemporaneously.

We have in all old herbalists, of course, a long list of cures turned up by the turnip ; most of these benefits, however, belong to all wholesome vegetables, which are properly cooked ; these utilities appear under the name of making the "stomacke soluble," curing scorbutics, &c. One of the famous old remedies for hoarseness, which is still retained in country places, is covering sliced turnips with sugar, and when the juice dissolves into a syrup, saving it for the intended "emollient." It is very probable that this farmer's capillare may be healing, and, when taken in sips, would soothe down an irritative cough ; this syrup was called *Sapa* of old, and had its curative merits. As to eating sliced turnips with pepper and vinegar, as a salad, it is a taste which does not obtain use among us now ; nor will modern horticulture permit us to be thrown back upon such raw and coarse resources. Our aboriginal straggler, the wild turnip, we have brought into the arable field, where, as the *Brassica rapa*, it is ravenous of the substance in the soil ; but when in its turn devoured, it goes far, in another form, to replenish its place of nurture. But say

that we have gathered some of our wild plants, and taken them into the vegetable garden, there, known as the *Rapum sativum*, it is "sat" by another propagator, the gardener, who guides it further on its way to the kitchen, where it is finally received by the cook, as one of the most universally applicable of culinary materials. Agriculturally, horticulturally, in the *officina*, or drug-shop, and in the *culina*, the kitchen, we have attended our vegetable all through its course; but one matter remains yet for us to do, we must say a few words, according to Dean Swift, on the political history of Irish turnips. The groans of the grumblers, in old times, were as great an annoyance to slowly-moving legislators as they now are; public speaking was more restricted, the old authorities were, of course, more suspicious and prying; crimes, by implication, were more easily attributed, and more difficult of contradiction, they were the more readily believed. Swift records, in his own way, the sensitive feeling of the Government in 1732, in his "Examination of certain Abuses, Corruptions, and Enormities of the City of Dublin." The Dean says, "I shall mention one of the public cries of Dublin which has reference to politics; but it is, indeed, of all others, the most insolent, as well as treasonable, under our present *happy* establishment—I mean that of turn-ups, not of turnips, according to our best orthography, but absolutely turn-ups. We hope to see the cards shuffled once more, and another king *turn-up* trump; and when shall we meet over a dish of turn-ups? The same term of art was used in plots against the Government in trea-

sonable letters, written in ciphers, as you may read in the trials of those times.

"It is to be observed, that this cry was sung in a very particular manner by fellows in disguise, to give notice where those traitors were to meet in order to concert their villainous designs.

"I have no more to add upon this article than an humble proposal, that those who cry this root at present in our streets of Dublin may be compelled, by the justices of the peace, to pronounce *turnip*, and not *turn-up*; for I am afraid we have still too many snakes in our bosom; and it would be well if their cellars were sometimes searched when the owners least expected it; for I am not out of fear that *latet anguis in herba*—or, there is treason hid in the turnips."

Nearly a century and half has elapsed since this quiet drollery was levelled at the tremulousness of a timid authority in the Irish capital; and to this day, as then, when you visit the Coombe, where the Drapiers' Sympathizers flourished and faded, you meet an aged man, leaning on the low back of a donkey's cart, whose eager eye ranges along those lofty half-ruined houses, and, searching from the cellars to the garrets for an answer, raises the ancient invitation or warning, to summon from their seclusion, below or above, the still discontented natives of that locality. Swift saw this hawker's antetype, noted his ragged costume as a disguise, and left us his ancient Irish melody secure—which is "Turn-up," "Turn-up."

Our vegetable has been named in plainest verse by one other of our wits. Gay, when speaking,

"Of the tide
Whose sable streams beneath the city glide,"

introduces decaying vegetables as one of its notorious constituents ; and describes, in a manner that might edify a Board of Health, how there is

"Below a black canal of mud,
Where common sewers a lulling murmur keep,
Whose torrents rush from Holborn's fatal steep ;"

and, disinterring again that ancient Roman goddess, who, when raised, was not quite so bright in her colours as the Venus of the Sea, he tells us that for her

"The heaving tide
In widen'd circles beats on either side ;
The goddess rose amid the inmost round,
With wither'd turnip-tops her temples crown'd."

But when she disappeared from earth she dived, instead of soaring—

"The goddess plunges swift beneath the flood,
And dashes all around her showers of mud."

Now, this association of delicate ideas makes the Holborn story *a propos* to the Coombe, or any uncleansed street or way, where the channelage, rough and rugged, prevents the flow of water from flushing or scouring the underneath sewerage. The goddess of these foul-poisons which come up through sewer-gratings could not have a more appropriate wreath to laurel her victories over health, decency, and comfort, than the rotting herbage of the *Brassica* tribe : their decay is quick, and their exhalations so nitrogenous and foetid, that their deposits in fermenting masses are nearly as dangerous as those animalized poisons which we believe sanitary laws will eradicate, by compelling extramural burials. It is

hoped the inhabitants of towns will zealously labour to get rid of the malign influences from all decaying substances within their precincts; but every material has some fitting use, and the lawful worship of the ancient subterranean goddess, may be revived under the beneficence of an effective Sewerage System. Then shall her turnip-top wreath grow green and gay, while what poisoned the pent-up city, in the country becomes the pabulum of life.

Our next *Brassica* is *Campestris*—so called from its growing in the *campus* or field; it is also called common wild *navew* or *naphew*—a word, as we have before ascertained, derived from "*napus*," a thickened nape or collar, the stem being somewhat fleshy, and, consequently, capable of being dressed like asparagus. We need not delay to give the botanical specific characters of the wild cabbage; those who find it in corn-fields will be easily led by its general appearance to determine its specialities; a large yellow blossom, with glaucous green leaves, clasping a stem of about two or three feet high, will bid them look into their flora, and try if they have found the *Brassica campestris*. Our supply of matter from which to select a short history of cabbages in general is too abundant for our purpose; we must, therefore, refer our readers to some of these stores of knowledge, in preference to the attempt at abridging them. Phillips's "*History of Cultivated Vegetables*," contains a sufficiently copious account of cabbage. Louden's "*Encyclopedia of Gardening*" has a more modern consideration of its history; and, indeed, all gardening and

farming works give it the space its importance to man and to his tributary animals has long demanded. One of the best accounts of this vegetable is in the "Library of Entertaining Knowledge," in the volume entitled "Vegetables Used for the Food of Man;" and I shall give no more acknowledgment than this for what I may select for my abstract. Respecting our present member of the family of the *Brassicas*, authors write but little: where two travel on horse, one must go in front; and so it is with these cross-words—the younger brother, the cabbage, carries away the public attention and position by his greater usefulness. *Brassica campestris* has scarcely a thought given it, except by our faithful historian, Gerarde, who says, that "Wild colewort hath broad leaves not unlike to the tame colewort, but lesser, as is all the rest of the plant; is of nature wild, and, therefore, not sought after as a meat;" but is sown and husbanded, adds Threlkeld, upon ditch banks, for the seeds' sake, by which gain is often gotten. These *Brassicas* are a very social tribe, and know no exclusiveness in their family arrangements. Propinquity provoketh consanguinity among them, says an old author; and their progenies are of all commixture. Salmon, an herbalist of 1710, tells us truly, that for the specification of the cabbages it is vain now to be particular; and either by design or accident, the varieties in this vegetable have been ever since that time accumulating. The busy-bee, much dusted with the pollen, flew from blossom to blossom and made a mixed generation, which

often baffled the seedsman's hope in a pure race or kind; while the skilful gardener cultivated by transferring some superior occasional quality resulting from happy combinations, but which did not in that form belong to the *Brassica campestris*. Chrysippus wrote a whole volume on their virtues, applying them in some shape or form to every inch of the body and every feeling of the mind; so you see that this very plebeian plant, the very name of which as a dish fastidious persons, with an unexplained affectation, abjure at their dinner tables, has afforded literary matter for copious volumes written by dieticians and sage mediciners from the days of imperial Rome until now. I heard a military officer's lady say that she drove a *mimini pimini*—major's wife—to such extremity, by calling *cabbage, cabbage*, that she, in her elegance, had to induce her major to play minor, and to exchange out of the regiment where such an outrage could be committed with impunity. The consequence of asking people will they take "vegetable," when, perhaps, the dish is unopened and the contents a secret, is notorious and inconvenient. It is difficult to discover whence this coxcombery has arisen. People of good sense cannot but apply Sir Hugh Evans's repudiation to this practice of mock refinement in language, and think, at all events, if they do not say, "What phrase is this?—why, it is affectation." If, indeed, the word cabbage was subject to any possible equivocal, prudery, which is never truly delicate, might make a show of shunning it; but there is no such excuse for getting rid of a name,

and supplying its place with an anomia. It is dangerous dealing with those superfine people ; yet I will risk it, and give to the nationalism of one of our rural philomath's a revival here. A good "Irishian," as a scholar in "the vernacular" is styled, is always somewhat of a Latinist besides ; and, holding it as undoubted that the more juvenile tongue is no other than the Celtic cloaked in Æolic terminations, our ancient philologer never looked into Ainsworth until he had first sacked O'Reilly, having found the hard Celtic word *Bresic*—meaning a tegument, and softened down into *Brassica*—he announced it as the origin of the northern Irishman's (*vulgo*, the Scotchman's) mode of designating his inferior garments, or "breeks." Getting on thus to the specific distinction of our plant, *campestre*, he finds a second explanation in addition to that of a "flat field,"—it also means "*tegmen*," a covering, an apron ; upon this hint our Irishian pronounced he had discovered why early Celtic writers had repudiated the notion that mere fig-leaves supplied materials for the primitive tailoring of Paradise. Thus does our bold Hibernian scholar and antiquary triumphantly prove, that it was not in a paltry plication of fig-leaves Adam and his Eve enveloped themselves, but they fetched from their vegetable garden the superior substantiality and size of cabbage-leaves, which were laid in folds around them for a cincture. He neatly shows that the kilt was continued from that paradisaical era by the Irish, although now worn chiefly by the Scottish branch of the Celtic people ; and also

thinks that the variety of *Brassica* called red-cabbage may have been alternated in the petticoat, with the greener leaves as a tasteful variety, in this ancient vegetable tartan; which, being cool and comfortable, would be suitable enough in a warm Eastern climate. Many plants have had some time of introduction allotted to them; and we are but too happy at finding the causation of cabbages traceable up to the mythological period by some horticultural Hesiod, a metrical version of whose *Brassic-ogony* is here produced:—

“It is said our wild-cabbage—*proh pudor*—
 Sprung from blobs of King Jupiter’s Sudor.
 On Olympus, the gods once in quorum
 Had a case and cross-case laid before ’em;
 Lawyer Momus brought in all the pleadings,
 Full of cranky, queer roundabout readings;
 Till he posed the “grand wig” of the session
 With his spice of the tricky profession;
 For law is a mess and a mystery,
 As appears in all new and old history.
 Judge Jupiter often sought laurels
 By mixing in mischief and quarrels;
 The Dog and the Fox had a fight,
 And his godship must needs set them right.
 Videlecit, forth comes the hound,
 And proves in his nature ’tis found
 As his privilege, when he is willing,
 That vermin, the fox, to be killing.
 The Modereen Rue* next replied,
 That while yelper’s case was not denied,
 There were instincts long granted by fate
 On which Pincher’s *penchant* must wait;
 For Foxes, from nature, elude
 The Beagles by which they’re pursued.
 Lawyer Momus then followed the fact;
 Quoted Martin’s benevolent Act;
 And denounced, to an unwilling Court,
 All hunting and killing for sport.

* “Red-dog,” Celtic for fox.

Such moralities maddened King Jove,
God, goddess, and nymph of the grove
Would hunt, and destroy a quadruped
For sport; so it needs must be stupid,
And very bad taste, to decry
The diversions of people so high;
Who, like our own princes, love chasing,
And patronize gambling and racing.
But this contest of fate against fate
Put the Court in a quandary great:
Both sides seem'd entitled to victory
From laws which are stark contradictory.
The *resumé* of Jove's joking jester
For decision gives puzzle and pester:
Nature seems to claim power for Pincher —
Fixed fate is for Reynard a clincher.
Now his godship, with fume and with fret—
Excuse me—burst out in a sweat;
For working so knotty a thesis
Induced copious diaphoresis;
Thus Jupiter Pluvius became
The dew-dripping deity's name;
The affluent sweat on the sand
Made verdant the barrenest land;
And a problem to bother a Babbage
Thus caused the causation of cabbage.
But how was the legal case ended?
Arch Mercury Jove thus befriended;
Come, governor, be not down-hearted;
Suppose Dog and Fox have both started,
That chaser and chased are let run
As the fates have their fix'd tethers spun;
There must be some end to their scamper,
Or the *finis* your worship might hamper.
In this peripatetical college,
Though Minerva should lend you her knowledge,
Lo, lest you should make any blunder,
Work a slight metamorphical wonder,
And turn the two beasts into stone;
Presto—Reynard and Pincher are known
In Naples as guards to the grot
Del Cani, where canines are caught
To be stifled, because they gave pain
Long ago to King Jupiter's brain,
Made his seething Medulla exude
Crass vapours, all acrid and crude;

Which his virulent fretting exalted
 Into sweat, very bitter and salted;
 And on the sea-beach where it fell
 Now the wild-cabbage flourishes well;
 But 'tis acrid and saline as yet,
 As if watered by Jove's bitter sweat."

It is to be hoped that, after this beginning of our history of the cabbages, those most jealous of their honour will see that we have not slighted them, even the Lady Valisneria, who, in the work on "Whim-whams," attributes perception to this vivacious vegetable, could not now complain. Her servant was wringing the head off a cabbage, when the sensitive mistress screamed out, "Ah! you cruel wretch, if it is your nature to appropriate your fellow-creature for your food, decapitate the head of cabbage, and do not torture it by twisting its neck in that cruel manner." But we must postpone the remainder of our lore to another chapter; to prepare for which transition we must conclude with our plant, celebrated as a mere eatable by Robert Burns. He says:—

"For me, I can be well content
 To eat my bannock on the bent,
 And kitchen't with fresh air;
 Of lang-kail I can mak' a feast,
 And cheerfully hold up my crest,
 And laugh at dishes rare."

Horace added something to his recommendation of cabbage, and deemed it well for a workman to work out of. He says, in his second "Satire" of the second book—

"I saw the hardy hireling till the ground.

His cattle graz'd, and children listening stood,
 The cheerful swain his pleasing tale pursued;
 On working-days I had no idle treat,
 But a smok'd leg of pork and greens to eat."

CHAPTER XIII.

SEA-CABBAGE.—NUTRITIVE QUALITY OF GARDEN CABBAGE.—CAULI-
FLOWER,—COW-CABBAGE: VEGETABLE ANTIPATHY.—KAIL BROSE.
—CALCANNON.—FORTUNE-TELLING WITH KAIL-STOCKS.—PICKLED
CABBAGE.—RED CABBAGE, ETC.

THOUGH the last, by no means the least important of our *Brassicas* is the *Oleracea*—so called because it is one of the very best vegetables to dress in an “*olla*,” or pot. In its wild state it is the Sea-cabbage of our coasts, which is found now but sparingly. Its greyish-green leaves, bearing a hue common to many plants near the sea, are waved, lobed, and very smooth; it grows about two feet high, but at first it spreads a good deal on these clayey sands where it has not been extirpated by being used for food; it makes a notable part of the sea-beach herbage, its broad thick leaves being pictorial and characteristic. We find that, in Raffaele’s two cartoons of the “Miraculous Draught of Fishes,” and the “Charge to Peter,” advantage is taken of the full-sized and acanthus-like structure of this plant, the foregrounds of the pictures being enriched with vigorous portraitures of the common sea-cabbage. As a vegetable, when our sea-cabbage has been reclaimed and civilized, it puts on a very different aspect, changing its somewhat picturesque form, but improving in its domestic fitnesses, like its frequent “pot companion,” pork—the wild pig also being a striking and somewhat picturesque

object until man has tamed him, and made him as if he was merely born to be fatted, killed, and eaten. Thus our garden cabbage, instead of making part of a cartoon, or showing its yellow flowers for ornament, becomes a valuable subject for an "interior;" which, it is to be hoped, may soon be as generally a portion of an Irish picture as it has for a long time been of Dutch and Flemish domestic scenes.

It is quite gratifying to see most of our country cottages now surrounded by a cabbage garden, enabling the owners to hope for the days when Sunday's home quiet will present on the dinner table "a pig's cheek reposing on a bolster of boiled cabbage." As a horticultural point of experience, we are told that cabbage exhausts the ground very rapidly of *proteine*—the new name by which matters convertible into nourishment are designated. Well, if it separates this pabulum from the soil, it also makes it more accessible and readily attained to by man's mouth and stomach, which is a worthy duty in our vegetable; but the consequence of this accumulative and preparing power over nutritive matter, is the great value of our *Brassicas*, they gather it and store it for us; and in a palatable form we have made ready for us a plentiful supply of *proteine* matter.

The *Edinburgh Review* of January, 1850, gives a comparative catalogue of the applicable contents of nutritive substances; and we are rather surprised to find it stated there that cabbage contains 40 per cent. of muscle-making matter, while wheat produces only 12 per cent. of it. But it must be remembered that wheat in grain, and

cabbage in the green, are not spoken of here; it is the dried substance of each which is compared; and what a world of water should be dried out of cabbage before it would be in its perfect dessication similar to wheaten flour. The science of food has occupied great attention lately. During a former scarcity, Count Rumford opened up the subject, and the distress of the period secured some notice to his inquiries; but recent famines, and changes in the rent-value of land, have again made the economics of food a popular subject of examination. Scientific writers on agriculture have given this topic a wide scope. The business of farming is to cause vegetables to assimilate minerals into a form nutritive to cattle, who, in their turn, are intended to carry on this process, and present these substances more highly organized, as flesh, fitted to be the highest kind of food for man. This whole subject, then, becomes, to a crowded and high-living population like that of the British dominions, a question of life or death. We have, consequently, multiplied analyses of the nutritive contents of various articles of diet, and they are full of present interest to all inquirers. We cannot do more here than state that they are very accessible; one notice from them only shall here be quoted. Periera says that the cabbage tribe lose 90 per cent. of water by being dried; and in that form, as he repeats from Bousingalt, 83 parts of the meal of cabbage are equal in nourishment to 100 parts of wheat. But these mere chemical conclusions as to nutritious equivalents, must be taken with caution; there are important circumstances which regulate the assimilation of

food not within the grasp of laboratory expositions. Proximately, the rudiments of nutriment may be thence propounded; but, afterwards, we must go to common experience to ascertain the adaptability of any food, however plentiful, to the organ which is to appropriate it. The quaint but learned Abernethy conveyed the idea that life and living beings have their peculiar powers, which are beyond mechanical or chemical laws, when he said that the stomach was not a stew-pan nor a still, but a stomach. Indeed, the herbivorists have always omitted from their statements many important facts, oversights of enthusiasm which much interfere with the conclusiveness of their arguments, and leave untouched that principle of popular dietetics which asserts that a mixed food is the best general support for all our energies. It is undeniable, except by mere fire-side philosophers, that hard-working people are never in full power physically, in peace politically, or, I may say, in progress morally, without a sufficiency of mixed food to aid in producing a sound body and a sound mind. We want, then, for our feeders mixed food; and I can give a semi-Celtic aphorism, proving how desirable it is that Paddy should command milk and fish with his "potatoes galore," plenty of turf to boil them with; and, to crown all, on Sundays and on holidays

"Pork and *cabaistha*
Which make a full man of a growing *paistha*."

This food is, of course, recommended not for a baby, but for "a growing *paistha*" (a youth); and there can be no doubt that nutritive support given

freely to the young of all animals, human beings included, materially influences their size and weight, when they arrive at adult growth.

Quetelet, the very eminent statist and physiologist, proves, in his "Essay on Man," that the Irish are the tallest and weightiest people in Europe. I hope that we, as a nation, shall for a while escape his scrutinizing statara, until the reducing effect of scarcity and famine has passed away, or has been repaired among us; otherwise we must experimentally lose that high physical character which the unprejudiced Flemish philosopher has established for us. Quetelet has clearly proved, by his statistical calculations, the truths which popular opinion always asserted on this subject, viz., that strength and weight are the results and exponents of the quantity and quality of food which we use and properly digest; so that the scale of the prices of nourishment, and the scale of the dynamometer, have many indications in common. Our Irish mothers—who, indeed, are good physiologists instinctively—nurse their infants famously; and except when the supply was cut off by the direst famine which ever afflicted a people at all advanced in the art of producing a store of food to any reasonable extent, the nursing of the young—the early nourishing—was always fully and freely supplied. Whatever hardships adult life might inflict on the Irish peasant, his formative period was not stinted; and his model, if we may so speak, was sustained in complete dimensions. A true parentage was his at that season when his future was determined; like an infant Hercules, he enjoyed the fulness of tonic

nursing, which throve well with him; and though not entirely goddess-born, he possessed in babyhood extraordinary vigour and power, because he fed, both morally and physically, while milk was proper for him, on the plenteous stream and full flow of human kindness; also the growing *pais-then* was secure of his more than a child's share of the pork and *cabaistha*, which succulent supply confirmed in the gossoon what mother's milk had so well begun in the infant.

We now return to the catalogue of names which our plant has borne. All kinds of cabbages were formerly called *Coleworts*; they were so designated from the Latin "*caulis*," a stalk, as the young stalks, when boiled, were very palatable. These branches were in one variety headed with white masses of delicate food; and it was then well-known as the *cauliflower* or *stalk's-flower*—the boytryoidal cabbage of structural describers. Homely gardeners are wont to say that there is "no flower like the cauliflower;" but for us this restriction would be a gratifying of gout at too severe a sacrifice of taste. We may indulge both in their proper places. The varieties of kale are endless. The *Gardener's Chronicle* of 1850, gives, at page 276, one of the most recent of these descriptive catalogues. One only from among them has been deemed ornamental, so as to be introduced into the shrubbery—it is the variegated plumage kale, and is sometimes introduced as a garnish, or decoration round fruits at table.

Cow-cabbage was recently made a subject of great notoriety. It is a variety which grew to a great height in the Channel Islands,—in many in-

stances over twelve feet. It was puffed exceedingly under the title of Cæsarean cabbage, and the seeds were sold at from a penny to a shilling each; but out of their limited insular home they offered no agricultural advantage at all.

The antique curiosities of cabbage history are loose and diffuse, like a badly-headed Battersea. Lord Bacon is great in extending small causes into great effects; he says that raw coleworts prevent intoxication. Alas! for him who has no better means of prevention than this quackish specific. But our learned philosopher gives a reason for his remedy. There is, he says, a natural enmity between the vine and the cabbage; so much so, that the vine will wind away when growing near to it; and if it cannot remove itself it will die. Probably the deficient deduction from facts on which the great master of deductive philosophy based his belief may be, that the vine and the cabbage being both rank feeders and great consumers of vegetable nourishment, they cannot flourish very closely together without exhausting the soil. It seems, however, that a fabulous exaggeration disfigures whatever fact is in the observation. The seeds and the juice of cabbage are also given as a means to enable men to commit excesses in vicious drinks with impunity; temporary, however, must be the advantage to be gained by him who deliberately plans a sensual debauch, protected only by cabbage as his conservation or cure. To such a man, confirmed beastly habits of drunkenness will become unconquerable and destructive. Derivations of the words *Cale*, *Kale*, or *Cole*, are founded on the Saxon term "*kele*," a pot; our herb

being long the most eminent of pot-occupying vegetables. We have still to use the word "*keeler*," a vessel or tub; and in the *finale* song of "Love's Labor Lost," we have it cheerily introduced—viz. :—

"Tu-whit, tu-who, a merry note,
While greasy Joan doth *keel* the pot;"

meaning, we are told, either "to skim a pot," which may, indeed, have pork and cabbage in it boiling, or otherwise to scour its bottom well out previously to cooking these enticing viands; and thence our umbrageous plant may have been called *keel-wort* or *kale-wort*.

The winter stock of this vegetable used to be put in the ground by September. At that season, Tusser tells us, in his "Hundred Points of Good Husbandry," "Set privet or prim, set borecole like him"—that is, at the same time.

But let us now try and progress in our etymology—*query*, the derivation of the name cabbage? Johnson's Dictionary gives no help, Celtic or Saxon; it merely tells us it is *cabus*, in French; and the French *Dictionnaire* says that, combined with *chou*, *cabus* means hard. Now, this is a very hard etymology; but, to assist us on, we find *cabas* to be *la belle langue* for a frail of figs. Well a drum-headed cabbage is something like the shape of that globe, flattened at the poles; but it is rather a constrained origin for our name. Then the Latin gives us no aid at all; but, come, what joy and dignity it is to find the root of our shunned and repudiated word in undoubted Attic Greek; take courage, then, "here you are." *Kabe*, food. Do you espy cabbage now?

And then follow the words "*kapto*," to eat; and "*kabos*," a corn-vessel or measure—a kind of *cornucopia*, which might indicate that true Irish union, so well sketched in the song of William Maginn, viz.:—

"Pigs galore, magra asthore,
And cabbages, and ladies."

Various curious powers have been attributed to the different varieties of *Brassica oleracea*; but some of them are still awaiting that rather requisite aid to belief—viz., the proof. My Lord Bacon tells us thus another of his tales:—"A cion of an apple, graff'd upon a colewort stalk, sendeth out a great apple, without a core." His lordship then gives many reasons why this legend should be true; and it was thought, even by this great master of *objective* proofs, that assumptions were at times to be favourably received. A sappy scion put into a moist envelope, such as a cabbage stump, might swell its buds, and make a rudimental effort at growing; but that is all the vegetation which can proceed; the buds will soon wither, and the scion must die.

The stalky kinds of cabbage are among the most hardy, and were thereby most recommended for general culture in the trying Northern climate of Scotland. The kale, with its custoc or pith scooped out, was bore-kale. And Robert Burns tells us that it was not rich, succulent, and highlymanured cabbage which the Scottish peasant enjoyed, but a poor, ill-favoured, ragged plant, which, when boiled, was so thin and transparent as to be called muslin-kale. Scotland's immortal poet of domestic life, when he apostrophizes his

kilted muses, his inspiresses, and guardian angels, thus describes the quality of kale, his nation's accepted vegetable, viz.:—

“While ye are pleased to keep my hale,
I'll sit down to my scanty meal,
Be't water-brose or muslin-kail,
Wi' cheerfu' face,
As lang's the muses dinna fail
To say the grace.”

Cayl is the ancient Saxon word from which the Latin *caulis* is formed, and which is also made into the modern English word *cole*. Johnson omits *cale*, and likewise *kale*, which was the Scottish form of the word; probably because he hated and despised the North Britons with a most energetic and unsparing detestation.

We everywhere find universal proof of the nourishing qualities of this vegetable; and the old herbalists give dozens of powers to it, all of an opprobatory kind, though in monstrous hard words, no doubt. Salmon is especially copious in his characteristics of cabbage, and closes a long palinode of its praises by saying that it is emollient, pectoral—the *ne plus ultra* for nurses; being, as he tells us, in his Greekish phrase, *galactogenetic*, or milk begetting. These long-enjoyed popularities have secured for our plant a homestead near mankind for ages; and we find that kail-yards were the care of the judicious Scotch people lang syne, though our Irish peasantry are only now beginning to cultivate cabbage generally. Burns notices this green crop in winter as affording the stinted hare, when other food had failed, a green nibble in snowy weather, viz.:—

"The sun had closed the winter's day,
 The curlers quat their roaring play,
 And hungry maukin's ta'en her way
 To kail-yards green;
 While faithless snaws ilk step betray
 Where she has been."

In England, too, this culinary treasure occupies a portion of ground in the form of a cabbage-garden; and from the burly plant whose compacted head is cut and divided for the convenience of boiling, to that whose looser texture has its cookery done by separating the greener leaves, the cabbage holds still a well-deserved culinary pre-eminence. English Dryden says, of a housewife's care, that—

"She took the coleworts which her husband got
 From his own ground—a small, well-watered spot;
 She stripp'd the stalks of all their leaves; *the best*
 She cull'd, and then with handy care she dress'd."

But our Irish cooks have added potatoes, butter, and sometimes fish, to the boiled greens; and certainly, if this be well prepared, it is a dish the country need not be ashamed of. Some kind of *Olla podrida* in verse was once likened to this compound, and a criticism on it gives us a rhyme for our native mince-pie, viz. :—

"He mixed them all in his poetic platter,
 And thus he made calcannon of the matter."

Calcannon—why is this dish so named? Alas! I have failed to find out as yet. The first particle, the substantive part, is *kail*, obviously enough; what means the *cannon*? The Dutch have *kan-nen* for "kenning," knowing; but in this matter I am not kenning, cunning, nor knowing.

Stay, a kind friend has supplied my want, and has suggested for my incapacity the Celtic *Cainnon* or head, the thick poll of a leek with its but or head, which mashed, would be right savoury with the cabbage, potatoes, and fish, and would give to the tongue for taste and for utterance, a perceptible and meaning "Cail-cainnon."

The pharmaceutical importance claimed for cabbage, in its various forms and productions, must now be glanced at. What they were formerly specifics for seem to be beyond enumeration. Salmon tells us that the old Romans expelled physicians out of their territories for six hundred years, and yet did maintain their health, by using and applying cabbages and coleworts as their only remedy in every disease; nevertheless, this biographer of his pet plant divides its preparations into six copious heads. We cannot here follow out at length his boytryoidal brassicacious dilations, but must give a breviat, and record that the juice was of course good against all venoms—albeit every vegetable juice had this virtue with old pharmaciens. The receipts for their uses, too, are legion. We select one sample of medicinal conjuration, viz.:—Take an old cock fowl, beat him to pieces, and then boil him in a decoction of coleworts. This broth was good for about twenty griefs of the body: the syrup relaxed wheezings, and cured sore eyes; the electuary relieved those who were short-winded and pursy; the leaves were used as a mild drawing plaister for pustules and wheals of the skin, and against leprosy—indeed, before pharmacy had produced a more convenient protection for fretful

sores, smooth, cool cabbage-leaves must have had real utility ; and it was in modern times much used as the anodyne and protecting covering of that distressing ulceration, a scald head.

When our theatrical audiences took more of the public etiquette in hands than devolves on them in these days of police facility, a burly-looking squire placed himself between a lady and the stage, with his hat on, throwing the fair visitant into eclipse. The gallant gallery-company would not endure this discourtesy, but roared out, "Sit down—hat off." The rudesby was, however, a defiant stoic ; he resisted the storm of disapprobation, firmed his hat on his head, and stood square and immovable, to the lady's obscuration. What was to be done now ? A lull took place preparatory to some energetic assault on this rebel against the gods, when, in the silence, a voice was heard to say, in objuration—"Arrah ! boys, lave him to stand up awhile ; he is a poor tailor resting his legs ; and as for his hat, if you knew the unwholesome cabin he works in at home, you would pity his scurvy skull ; you know he can't lave the cabbage-leaves fall off from his poll." This successful jeer was too much for the uncivil oppositionist ; he dropped conquered on his seat, and proved to the audience that he could venture to take off his hat.

As to cabbage-juice being, as is often reiterated, a cure for drunkenness, probably it was a safe emetic, and that with it the wallowing beastliness of former times was encountered. Modern sensuality, however, does not go quite so deliberately, and of *malice prepense*, to plot a debauch,

making drunkenness of easy repetition and manageable. Kale had also, it would seem, a place in classical history ; it was known in the age of the demigods ; and, like most productions which had eminent qualities of any kind, either for good or evil, was made a subject of vow, abjuration, or objugation by the Greeks. There was some such character early attached to it, for the Ionians used to swear "by the sacred cabbage." I have heard a person in this country, too, swear "by the holy cabbage." At the time I thought it was profane nonsense or idleness—query, could it have been an oath remaining traditional among our numerous Asiatic customs and Eastern practices ? This topic invites us into the region of romance and fortune-telling ; and our very happiest help we will get from "Rab the Ranter." He tells us that

"Some merry, friendly, contra folks
Together did convene
To burn their nits, and pou their stocks,
And haud their Halloween
Fu' blythe that night.

"Then first and foremost thro' the kail
Their *stocks* maun a' be sought ance,
They steek their een, an' graip, an' wale
For muckle anes and straight anes.
Poor Hav'rel Will fell aft the drift,
An' wandered thro' the bowkail,
And pull'd, for want o' better shift,
A runt was like a sow-tail,
Sae bow'd that night.

"Then straught or crooked, earth'd or clean,
They scream and laugh 't each other ;
The very wee things todlin' run
Wi' stocks out o'er their shoulder.

And gif the pith is sweet or sour,
Wi' cutty knives they taste 'em;
Then cozily aboon the door
Wi' cannie care they place 'em
To lie that night."

This general description is explicit enough. The particulars in the amatory fortune-seeking are, that all parties who go to pull up the kail runt or stalk are blindfolded, and as each inquirer pulls up the first stock he or she lays hand on, it is prophetic, if it be straight or crooked, of what shape a future wife or husband shall be. If earth sticks to the root, that is *tocher*—the fortune; and the mildness or acidity of the *cus-toc*, or pith, points to the temper of the lover who is to be. We have an old fable of the Irish application of this kail-craft. Three young girls went out into a cabbage-garden to draw a love-lot of this kind, but with their eyes open; the youngest took the very first plant that came to her hand, but—alas! it snapped off close to the ground, she had seized it so impetuously. Her story was told. The second sister went to work more cautiously, got farther into the field where the ground was softer, and then pulled up her pattern of a man. He was not perfectly straight, neither did much yellow clay stick to him; but he was passable every way; and the girl, though not delighted, was more than contented with her prospects of the future. The eldest girl jeered at her sister's ill-luck, and went peering on for better probabilities; she rejected one stalk because its head was too green; and another, because it was like mildew, all grey; she thought some sweet-

heart-symptoms too tall, and others too short, and thus she loitered on through all the soft cabbage-ground, criticising, denouncing, rejecting, and, because none were better than "well enough,"

"She, like fastidious Judy Baxter,
Refused the men before they axed her,"

declaring that she would seek *higher* ground before she drew her luck. Well, she did so; on the upper land the planting was thinner, the succulents were more exposed to the wind, and, of course, more stocky. Her prudent, satisfied sister now warned her that an old saying suggests how

"Haughty maidens are undone
By getting from the ways of grace
Into the very brightest sun."

But all in vain; the proud, ambitious girl would persist in trying her luck among sundrawn stocks though they were yellow-looking and queer enough. But twelve o'clock was coming—it was too late to try back; she was close to the upland ditch, and she drew—alas! a club-footed cabbage. What could she do now? She could not unfix her fate; and fortune turned up for her a crooked-backed, hurled-footed, withered old miser, the very *moral* of the cabbage, in whose curled stump the yellow clay stuck fast; harsh and biting enough he was too in his heart's core—that is if he had any heart at all.

The minutiae of botany has been somewhat eschewed in this popular history; cultivated vegetables have stories about them which put scientific particulars somewhat in abeyance. There-

fore, it is almost enough to repeat that our original plant, the sea-cabbage or sea-colewort, is found on our sandy and rocky beaches, sparingly. Its leaves are of the well-known grey-green called glaucous; and from it come the several varieties of cabbages alluded to already. Cole-flores was an ancient and not inelegant way of naming the cauliflower. Pickled cabbage was reckoned a remedy against the spleen, and it would not be right to suppress so easy a method of gaining cheerfulness; perhaps an acid stimulant in moderation, may be useful to promote digestion in queasy stomachs. Red-cabbage juice used to be mixed with acid wines, and, when the colour was thereby changed from purple to pink, the old physiologists used to say it was the enmity of the fluids against each other, which, on their admixture, provoked this redness of anger to appear. Galen named wild cole-worts *Amethusos*, probably from their purplish-green hue being somewhat of an amethyst tint. Among the old gem and lapidarian medicine-men, the amethyst was held to prevent the ill consequence of various poisonings, and was specific against excess of wine, among the number; the jewel darkly wine-tinged, was pronounced antipathic against vinous ill effects. The purplish cabbage was in complexion also *Amethustos*, which fact finished its fine character as a cure; and draws our history of cabbage to an end, having placed it grandly among Greek Galenicals.

CHAPTER XIV.

CHARLOCK.—WILD TURNIP, OR PRASHAUGH BUIDHE.—WHITE MUSTARD.—GOOD FOOD CAUSES MUCH DISUSE OF CONDIMENTS AND SAUCES.—MUSTARD-SEED OF THE SCRIPTURES.—MEDICAL USES OF MUSTARD: MADE FORMERLY WITH WINE, AND WAS THE MUSTEM ARDENS—BURNING WINE.

PROGRESSING through the cross-flowered vegetables, we come to *Sinapis*—the Latin form of the Greek word *sinapi*, which is said by authors to be a term built upon the old Celtic word *knap* or *knob*, because all this tribe are, under certain circumstances, more or less turnip-like. Our first species, the *Sinapis arvensis*, is a wildling of great energy, and, as its surname imports, a successful intruder into arable fields. Lord Bacon tells us “that the ground putting forth a certaine herbe, discovereth well what nature is the soil; *Sinapi* sheweth a good strong lay for wheat; *Burnet* sheweth good meadow, and the like.” This is the well-known *Prushaugh Buidhe* of all Celtic authors, of our Irish farmers, and of our rural population. Our learned Irish authority, Caleb Threlkeld, says, “Some have made a great splutter about the word *Brassica*, which is no doubt the Celtic *Praissagh* put in a Latin termination, as all antiquarians will allow.” Its adjective marks its well-known colour, *buidhe*, pronounced with the “d” mute. It is almost needless to say that its yellow blossom is well known in corn-fields through May and June. No

doubt, a gorgeous show it makes in the green grass corn ; but "all is not gold that glitters." It is a mark of most slovenly agriculture, exhausting the soil, disputing the room with the cereal crops, crowding them injuriously ; shutting out the sunshine and the showers from the earth ; playing the freebooter in idleness and in rapine. The *praissagh*, like other bad growths, ought to be eradicated in time as soon as it appears among the corn. Shakspeare tells us the proper season to eradicate it, when he says, happily—

"Now 'tis the Spring, and weeds are shallow rooted ;
Suffer them now, and they 'll overgrow the garden ;
And choke the herbs for want of husbandry."

Pulling this pirate out when it is high among the corn is difficult ; the trampling down of the blade is mischief ; the drawing up corn stalks with the weed, and the opening the ground in the often arid months of May and June, are all difficulties ; but "if the weed ripen its seed," not only does the corn crop take more picking and screening, but the seed of the *praissagh* impregnates the ground with a perpetual progeny. If it sows itself in the shallow ridges, it is up the next season, and takes possession energetically ; if it be ploughed into the soil more deeply, it is only reposing there, and though buried, not dead, for its oily rotundity resists decay—its life is very firm in it ; and woe betide the future farmer who, in his diligence, trenches deeply to put in unclean ground a corn crop ; for in his industry he gilds his field, without doing much more than producing an unprofitable golden glory, which triumphs over the remunerative green. It has been

known thus to cover a newly broken-up field which had not produced a single plant of the kind for over thirty years. English agriculturists have long called this plant *charlock*, for which name I have not found any origin as yet—it is the wild mustard of our popular language, and can be identified in any botanical book. Its economical uses are few, the other species of the genus having its properties in a more profitable amount. The young plant has been boiled, and in Spring is about as nourishing as turnip-tops. Indeed, as the word *prashauk* means porridge or pottage, the culinary use of our plant is well denoted by its Celtic appellation, and from it is manifestly educed *brashauk*, the *brose*—"the kale brose of Scotland"—a truly ancient Celtic brew. Cattle and sheep eat it, but horses refuse it; the seeds, too, have been given to birds instead of rape-seed, but, being more acrid, are found to disagree with them.

Our next native *Sinapis* is the *alba*, or white mustard; it is a common wild plant, but is sometimes seen in gardens at its full height of about a foot and a-half, with its leaves cut and toothed in a very various and *bizarre* manner, and showing a large yellow blossom, with its long-beaked seed-pod, which remarkable development distinguishes it readily from its near relatives.

Tusser tells us how to store mustard-seed, viz:

"Maids, mustard-seed gather, ere being too ripe,
And weather it well, ere ye give it the stripe;*

* Either to strip it, as Tusser's commentator says; or, more probably, the stripe of the thrashing.

Then dress it, and lay it aloft up and sweet,
Lest foistiness make it for table unmeet."

But it is not the uncrushed seed which was eaten, the flour of mustard was called "the seed" by old authors; *Bottom, the Weaver*, uses the name thus in his apostrophe to the fairy who was in attendance on his asinine arcadianism:—"Good Master *Mustard-seed*, I know your patience well: that same cowardly, giant-like *Ox-beef*, hath devoured many a gentleman of your house: I promise you your kindred hath made my eyes water ere now: I desire of you more acquaintance, good Master *Mustard-seed*." But of mustard-seed in grain, we have to note its remarkably quick vegetation. It will begin to shoot in a few hours; and the very delicate green colour of its leaves has recommended it for ornamental work in the domestic gardening of parlour windows, &c. Hollow vessels of wood may be constructed of various pleasing forms, such as cones, crosses, Catherine-wheels, cylinders, &c. These skeletons are to be perforated with small holes, and then covered with brown frieze or flannel; at the base may be a mouth for receiving supplies of water, which can be closed in by a cork. On the flannel envelope, strew a dense quantity of mustard-seed, and the wetness and roughness of the cloth will cause it to adhere; place the figure in a warm place, and in a surprisingly short time the whole form will come out of a lively green, these vivid seed-leaves looking very vigorous, succulent, and velvety.

Sometimes, in very small town parterres, this kind of toy-gardening has been exhibited, show-

ing freaks in words or letters on the plats in front of semi-rural residences; at in-shore little "rockeries," sea-shells have been made into urns, exhibiting tiny verdant patches of vegetated mustard-seed—the result of a very protean fancy, no doubt, but still far better for the imaginer than a state of indifference to gardening and its interests would be. This plant-alphabetering is a popular phytography in its own way, and gives its pleasure, too, by exhibiting ingenuity, patience, and even taste.

But there is an economical application of the ready life-spring of our mustard-seed. It is sown in boxes on board ship, to afford a salad where fresh vegetable food is a great luxury. It vegetates readily in perfect shade, as do most seeds, but it grows and gets its green colour with less light than many other plants; consequently, it does well with the feeble illumination between-decks, appropriating the heat of such a situation, and scarcely showing any want of energy from its limited supply of fresh air; thus we see that *Bottom* knew the virtue of "Good Master *Mustard-seed*," when he praised his patience.

The seeds of the white mustard are of a pale yellow colour, and the green of the herbage is of a lighter hue than that of the next species—the black mustard; so that these plants are distinguished, not by positive whiteness and blackness, but by relative lightness and darkness of tint in certain notable parts, which were easily brought into comparison.

We cannot perfect the history of mustard-seed without alluding to the use made of the word in

sacred history. The Gospel according to Saint Matthew, chap. xiii., verses 31, 32, records this passage from a parable of our Saviour—"The kingdom of heaven is like unto a grain of mustard-seed which a man took and sowed in his field, which is, indeed, the least of all seeds ; but when it is grown it is the greatest among herbs, and becometh a tree, so that the birds of the air come and lodge in the branches thereof." Now, we cannot attribute to our native mustard plant the distinction of having been selected for this illustration. It is true that our mustard is a native of the Holy Land ; and also, that in such a climate it grows much larger, and is more robust than with us ; still, allowing all this, and also for the full style of hyperbole used in the East, the similitudes would be overstrained and discrepant. Commentators, then, and even those who are not fastidious, and who do not, therefore, want to tie down the images of a figurative passage to a mathematically strict similarity, have examined what plant the Great Teacher meant by his word *Sinapi*. The discrepancies against our mustard are, its seed is not very small, and it rarely grows from a mere herb into anything deserving the name of a tree ; but learned travellers have shown that there are large woody shrubs which have aromatic and pungent properties growing in Judea, and which were formerly, as now, called *Sinapi*.

Dr. Beard, in his "Dictionary of the Bible," mentions one great shrub, in particular, which possibly might be referred to by our Lord ; but older scholars and botanists have described ano-

ther native of Judea, which agrees in all the requisites of the parable; this plant is the *Phytolacca dodecandra*, which grows abundantly in Palestine. Inquirers will find this subject handled at length in the different natural histories of the Bible; and, as some may be interested in the aspect and appearance of the Scriptural mustard, the *Phytolaccas* are to be found figured in "Curtis's Botanical Magazine." It would be out of place to do more than report the result of this inquiry here; but it is, perhaps, not too much of a trespass on patience to abstract the summary of the conclusions come to, as they are noted in "Calmet's Dictionary of the Bible," viz.:—The *Phytolacca* is the tree mentioned in the Gospels—because it is one of the largest trees indigenous in the country where the observations were made; because it has the smallest seed of any tree in that country; and because it is used for many of the purposes to which our mustard is applied. And, also, what is very interesting in a physiological point of view is, that having the same uses, it is said to have the same chemical constituents as its western namesake, the common mustard, although of quite another botanical family.

Lastly, mustard-seed has had a multifarious medical fame. Its last pride as a panacea was as a specific against rheumatism; whole ounces of mustard-seed were swallowed by people who were, as the old pun says, in the "room-attics," and incapable of stirring from their positions. Some were, by its heat, reported as melted out of their rigidities by virtue of this *mustum ardens*,

but some, of course, remained still refractory and infusible. It is doubtful how far a parcel of unbruised granules taken into the stomach might be injurious to the digestion of valetudinarians; but good faith in a remedy, which leads queasy people to swallow it, may do much to make it go down with good hope and grievous grimaces.

Our derivation of the popular name is "spicy," and we must enlarge a little on it. *Mustum ardens* is "burning hot vinegar." There was always in the world's surgical practice some method of counter-irritation; St. John Long's proceedings were not an original idolatry, but an aggravated revival of ancient practices, for we find that there was an old cure made with boiling vinegar, or wine—for both were called *must*—and adding to these the powder of *Sinapis* made the *mustum ardens*. It was applied as a cataplasm when boiling hot, and it was often a cure, no doubt; but at times its only effect was to "scaud poor wretches." This eschariotic was in a milder form diverted from the outside to the inside of the body, and was taken by flapdragon-drinkers, and other fire-eaters, as a dram; of course, the vinegar decreased, and the wine and ardent spirits increased, in this *mustem ardens*. At length, however, it settled down into our table mustard, and was eaten, as Tusser tells us, with everything:—

"Brawn pudding and souse,
And good mustard with all."

To this day some housekeepers make their mustard with vinegar; and the common dressing for cold and watery salads—the *salso-acid* of old

cookery — is mustard, salt, and vinegar. One more derivation of mustard may be remembered here. In a satirical catalogue of Treatises in an Ecclesiastical Library, we find one called, after the fashion of many quaint authors, *The Mustard-pot of Penance*. It might seem that the tongue-torture of this hot compound was here alluded to; but one of the happy note-and-gloss-makers of the time tells us, that the allusion is to *multum tardare*—much of slowness; accented, in the French manner *mouletarde* or *moutarde*, which is mustard. Our commentator goes on to tell, in illustration, that a certain French preacher laid a wager that he would commence a sermon with the word *moutarde*, and that it should be an acceptable one. He took up his oration with *moutarde, moutarde, moutarde*, and then followed with "*le pecheur a faire penitencee*"—"much tardy is the sinner to repent;" and, getting great applause for his punning preamble, he won his wager. The allusion to this story in the satire on the collection of religious books is, that the teaching from them was also *moutarde, mouletarde*—much tardy, slow, and inefficacious. This, however, was an inflated hyperbole; consequently, the contrast between anything inactive or dull and our acute, biting, energetic condiment, must have been a part of the joke; for to say that sleepiness or indifference could be expressed by the word mustard, was, indeed, a startling proposition—one which must have aroused, by its oddity, even very inattentive hearers. And so we postpone the remainder of this spicy subject for another chapter.

CHAPTER XV.

BLACK MUSTARD.—GROSS ADULTERATION OF MUSTARD: IT WAS A GENERAL FARM-HOUSE MANUFACTURE FORMERLY.—COMPOSITION.—LONG CONTINUANCE OF OILY SEEDS IN GROUND WHEN DEEPLY BURIED.—MUSTARD AND HONEY AS A SAUCE.

THE last of our native mustard plants is the *Sinapis nigra*. Its leaf is darker than that of the previous species; and the hull of the seed is of a blackish-brown colour, which distinguishes it from the yellowish seed of the white mustard. Formerly, in this country, the people ground up the black mustard-seed in a quern; and, as they left the hull with the powder, it was of a mixed yellow and black colour, and was cried in country fairs and markets with almost the French pronunciation, "*Fine fleur a mustarde*." In this pure state it was extremely hot and pungent, with a little coarseness of taste, which was not objectionable to consumers who liked their spices strong and hot. In that unrefined, and also unadulterated, state, it deserved the character of being a type of the hot Irishman who used

"Sauce, like himself, offensive to his foes -
The roguish mustard, dangerous to the nose."

The cheap rate at which mustard flour is now sold in the shops has driven this trade as a rustic manufacture out of the market, although with some apparent loss to the purchasers, for it is much weakened in its spicy powers by the more refined

form in which it is presented for sale. There is a cautious care among drug compounders in our days; they do not like giving their customers spices in their too pungent purity; consequently, it is with mustard as with many other things a fact that much of the grain which goes to the mill comes from thence with its natural fire mitigated. Indeed, it is said that flour of mustard is often made up of cayenne pepper pods, blended with farinaceous substances, coloured to please by chalk and turmeric, but totally innocent of having brought within the reach of the bruiser, for its happy composition, the life of a single sinapaceous seed. However, as few people adopt *Grumio's* bill of fare, and "take the mustard without the beef," the mustard grinders who enter into his idea, and think, "the mustard is too hot a little," cannot do much harm; besides we can do what *Katherine* could not, that is, "have the beef, and let the mustard rest."

Grinding mustard was a farm-house labour of very early date. We meet with an allusion to this custom in an old satire on miracle-craft, which tells us what that *ingenii* can hinder or perpetrate, viz:—

"Theyre wells I can up dry,
Cause trees and herbes to dye,
And slay all poultery,
 Whenas men do me move.
I can make stools to daunce,
And earthen pots to prauce,
And none shall them enhance,
 When I do caste my glove.

"I have charmes for the plough,
And also for the cow,
She shall give milke enow

So long as I am pleased.
Apace the myll shall goe,
So shall the cradle, too,
And the mustarde-querne, alsoe,
No man therewith diseased."

Plants that have a full domestic history become less the subjects of scientific distinctions than others, consequently the botanical description of *Sinapis nigra*—the common mustard—is of secondary interest; and it so commonly strays out of cultivation into wild places that, when met in lanes and on hedge-banks, we scarcely acknowledge its claim to be examined by book at all; but we ask the next farmer, is this the mustard? Suffice it to say, that its family likeness to the esculent cross-flowering plants is notable; its rough green turnip-like leaf, its yellow head of blossoms, and longish pods, are somewhat closely pressed to a stalk which is of two or three feet high, according to the richness of the soil on which it grows. The root is an annual, and is small, differing from those of the knobbed plants of the same order. Our plant is more often found in a true state of wildness near the sea on banks, than in the interior of the country. Dr. Goodenough remarks, that this species may be at once recognised by the leaves on the smaller branches being pendulous. We find, in Withering's "*Botany*," another meaning for *Sinapis*, which is certainly too applicable to be omitted—viz., "*sino*," in Greek, painfully to affect; and "*opas*," the eyes, in obvious allusion to the painful stimulation of the eyes, and all their neighbourhood, produced by the taste of the *Sinapi*; and which property gained for them, from

the Roman agriculturist Columella, the happy epithet of the tear-producing mustard, "*Fletum factura Sinapi*." Plautus has also left its fame for a poignancy recorded in his cognomen, *Scelerata Sinapi*—"the wicked mustard." Thus we see ours is a condiment of ancient as well as of modern dignity; its warmth, its acuteness, its activity are on record extensively. Gay makes it an illustration of love itself, in his "Song of Similies," where he says, "My passion is as mustard strong;" and we know, from *Touchstone's* communication to *Rosalind*, that mustard was sometimes, in Shakspeare's period, not as good as the taste for *haut gout* required; for "there was a certain knight who swore by his honour they were good pancakes, and the mustard was naught." Now, *Touchstone* avouches that it was "the pancakes was naught, and the mustard was good." So we see, also, that mustard was a sauce for pancakes on Shakspeare's Shrove Tuesday; and if they were not made then what cooks call light, it is probable they would not be digestible without some stimulator of the kind.

Smith, in "English Botany," tells us that mustard is one of the most useful and wholesome of stimulating condiments. Its composition is stated to be chiefly a starch; a bland fixed oil, like that procured from many of the seeds of cruciferous plants, and which has been expressed as an article of commerce; an ammoniacal salt, or some nitrogenous substance, indicating a natural adaptability to the digestive organs of assimilation in animals; and an acrid volatile oil, in which lies its more potential and significant properties. Its

power of retaining the vegetative life is similar to that of the other members of its family; it becomes hereditary for ages in fields where it once was cultivated; the surface-sown seeds being ever ready to appear, and those which get deeper remaining safely guarded in their oily coating, and waiting for even ages of time to be turned up to light, air, and moisture, and then to burst into life and vigour. The mustard of table use is recommended to be made with milk. Dr. Cullen, who devoted his eminent talents to the improvement of cookery by science, says that though, with milk, it makes a rich and unctuous bland sauce, it does not keep well; we can imagine that it was this method which was employed to subdue its fire when our friend *Jack Falstaff* resembled the languid levities of *Poins* to such a stagnant starchiness. Old *Jack* says:—"He a good wit! hang him, baboon! his wit is as thick as Tewksbury mustard: there is no more conceit in him than is in a mallet." This use of the word throws us back upon our own origin of the name again—the first syllable being "must," or vinegar; for Cullen tells us that, compounded in this way, the powder excels in pungency; and still older authors assert "that the *vitam ardens*, the 'living fire,' is better evoked by the solicitude of the alegar, for which it hath a willing affection." Our faithful friend Gerarde, in his letter "Of Mustarde's Virtues," says, "that the seed, pounded with vinegar, is good to be eaten with any grosse meates, either fish or flesh." And surely the old observer is right; those who will eat "grosse meates" do require "that sawce

which helpeth digestion, warmeth the stomacke, and prouoketh appetite."

We could give a volume of medicinal and surgical applications of our plant. Among the modern ones are retained usefully—weak mustard-water, as a tonic emetic; the sinapism, or wet blister, so called from the Latin name of the plant; and the dry powder, which is used as a rubifacient, to redden the face of the skin when it requires stimulation. Mustard was used in lethargy or coma, in rheumatism or sciatica, in toothache, in bruises, and in baldness. It was given as a sternuatory; such snuff may well be supposed to take a person violently by the nasal handle, and for a time certainly cause him to exhibit "a jolly red nose." Mustard mixed with honey was a conserve put on coldish fruits; and perhaps for some stomachs it would not be an injudicious kind of sweet fruit-curry. But we have been long enough about our "*pot moutarde*," and must conclude with one legend more about its name.

Withering tells us that, in 1382, Philip the Bold, Duke of Burgundy, granted to the town of Dijon armorial ensigns, "*Moult me t'arde*"—"I am much ardent"—which was sculptured over the principal gateway. By an accident one letter, "*t*," and the word "*me*," were broken out; it then remained "*moultarde*." The merchant dealers in *Sinapi* wanting to place the town's arms on the pots of their condiment, copied the words as they saw them, and the spicy compound remains "*moultarde*" in France to this day. We are not bound to certify this baptism on oath;

but some people hardly know that our commonest vegetables have their own legendary lore, which is to be found by pleasant searching ; if it be not solemn wisdom, those who like such story-telling science imagine it excellent in its own way, and, with *Sir Andrew Aguecheek*, are much won by it ; for to some tastes it is at least "the best of fooling," and if not highly dignified, it is instructively amusing.

CHAPTER XVI.

SEA-KALE.—CRAMBO.—COOKING-RECEIPT.—RADISHES : THE JOINTED CHARLOCK, THE SEA-RADISH, BOILED RADISHES : THE PEEL USED FORMERLY INSTEAD OF LITMUS.—LAST OF THE CROSS-WORTS.—THE AWL-WORT : A RARE LAKE-PLANT.—SWIFT'S RHYME FOR AWL.—THE END OF THIS GROUP OF PLANTS.

THE palatable and wholesome vegetable, Sea-kale, the *Brassica marina* of Gerarde, is now so well known in our kitchen-gardens that a description of it would be superfluous ; and, as a wild plant, acquaintance with its domesticated appearance is also a sufficient introduction ; for, although culture improves its size and succulency, it does not alter, but rather enhances, its natural characteristics. Good training and good nourishment are, of consequence, well bestowed in this case, the healthy aspect of a sea-coast origin remaining perfect amidst the pamperings of a garden life, exhibiting there an invincible rural vivaciousness and unbroken constitutional force, becoming a scene, which happily combines all that confirms to it the pristine vigour of a more simple existence, and shows the value of cultivation in perennial beauty, energy, and usefulness. The whole plant is, as we know, smooth, and the numerous leaves are spread widely on the ground where they grow wild ; they are waved and indented gracefully ; of a sea-green colour, covered with a fine meal ; sometimes they occur of a pea-green tint, without the delicate powdery shading. They

are also sometimes tinted purple. The blossoms are usually large and white ; they have been met with, at times, of a yellowish hue. The seed-pod is egg-shaped, but becomes nearly round when ripe, and is one of many little leathery boxes constructed to keep the seeds safely. When, on our sea-coast rambles in the Spring, we sometimes meet the sea-kale forcing its stout leaves up through sea-sand, where it is mixed with shingle or gravel, this rather arid home keeps it stunted, and it looks a very different plant as to size from the garden vegetable ; which is, indeed, more apt to draw attention after the cutting season is past, when the crop has been manured highly, and thus caused to flourish luxuriantly, to enable the roots to gather stores of vigour and life for the ensuing Spring's vegetation. When in June and July it blooms its honey-smelling white flowers, it is, for a vegetable, rather a showy garden plant ; even ornamental when the stable litter used in forcing is buried, and the blanching-pots or other unsightly contrivances put out of the way, until another Spring calls again for their aid. The inhabitants of the coast used always to cut the Spring shoots under the ground, as is done with asparagus ; but gardeners did not know of this practice until about forty years since. They attempted introducing it as a vegetable when it had grown into a colewort-like size, these large green leaves were then coarse eating, with a strong brassicacious flavour ; and, in consequence, the French cooks denounced *Chou mari Angleterre* as detestable. Good market-gardening now gives us this excellent vegetable

at a moderate price. It is of universal use at the table—either boiled in whole stalks like celery, put into soups, or presented in any way sufficiently cooked, and is welcome either to the healthy or delicate appetite. The late growths of cabbages or sea-kale, when eaten as boiled vegetables, have been found to disagree with some stomachs, giving a giddiness in the head—an effect which never results from the use of the early blanched stalk or asparagus sea-kale.

The botanical name of our plant is *Crambe maritima*, the generic name being derived from the Greek word "*krambos*," arid, dry—the leaves, as we noted before, habitually forcing up through dry, gravelly sand,—with the specific term *maritima* from the Latin word for the sea. We know nothing legendary about this esculent, but in looking after *Crambe* we find "*crambo*." Dean Swift seemed to think that the rhymings and jinglings which bore that name in his time sprung from as arid a human soil as the gravel which produces our *Crambe*; and in his wrath he denounced them thus:—

"So Mævius, when he drain'd his skull,
His similies in order set,
And every *crambo* he could get."

Yet the Dean was himself inveterate, along with Sheridan and Delany, at capping rhymes. *Crambo* with us might be a fair intellectual trifle, as an evening dessert after *Crambe* at dinner. This *petite* wit is known to consist of one person writing a line, and another putting a rhyming line to it, he being told the last word. This is

very allowable amusement, and would sometimes be an agreeable exercise of ingenuity. Indeed, the Dean himself produced certain cries for vegetable-women, which were droll and popular; and, if his Deanship had known our *Crambe*, I dare say he would have afforded us some crambo directions, such as this:—

“Listen, cook, to a patter,
With sea-kale the matter:—
Boil well, place in platter,
Then a little salt scatter,
Powder pepper on that, or
Sauce with nice butter-batter
And—though like a starv’d rat, or
A rake—chew, don’t chatter,
But your appetite flatter,
And you’ll surely grow fatter.”

And so much for sea-kale on the coast and after cookery.

Our next genus of cross-worts is *Raphanus*, a name contrived out of the Greek words “*ra*,” quickly, and “*phianomai*,” to appear—from the active vegetative power the seeds possess, in common with their near neighbours, those of the mustards. The first species we meet is the *Raphanistrum*, the most perfect *Raphanus*, called so to give it eminence. The leaves are a good instance of the lyrate form; they are rough, and, when picked young, make a good addition to a salad, as they are crisp, and very slightly warmed with the radish flavour, more marked in the root and seeds. The petals are yellow, netted thickly with more or less deep veins of purplish red. The whole flower looks somewhat like that of the single pale harlequin wall-flower. It blos-

soms in July; and the plant's height is about a foot. It is rather rare in the South of Ireland, but is a troublesome agricultural weed in many parts of England, where it is known as the jointed Charlock, the seeds being celled off in well marked chambers, which joints readily break away from the rest of the pod.

The ancient physicians called radish-seed *bacconon*; we cannot discover why. *Bakchia* is frenzy, madness; and Linnæus says that these seeds produce convulsions when ground up in flour and eaten in bread. This is, however, disproved in its extreme statement; but those acrid vegetables, when eaten in quantity, have had attributed to them very generally the production of headaches and vertigo. How often violent stimulants are repudiated, whether as acrid vegetables, or in the more decidedly mischief-marked *bakchia*—madness-making, stimulants. We find Theophrastus Dioscorides and Galen largely writing up radish-seeds for medical uses; their name is by some early writers changed to *kakanon*, probably from "*kaio*," to burn, in allusion to their hotness, or from "*kakaneo*," to excite,—the commonest medical application of them. Our common name, wild radish, we cannot here derive from the Saxon word "*rod*," red, because the root of the native is not red. The *Raphanus sativus*, the red or garden radish, though known to Gerarde, is a Chinese plant; and the English word by which our plant was called was in use before he adopted it.

The Roman physicians directed that radishes should be eaten raw, with bread and salt, in the

morning, before any other food ; and a more ancient rhymers on Domestic Economy than even Tusser, Barnaby Googe, recommended our vegetable, as a whetter to appetite and a tonic cure, viz. :—

“ Some radishe rootes this day doe take before all other meate,
Against the quartan ague, and such other sicknesse greate,
Straighte after this into the fieldes they walk to take a view.”

So we see that after this somewhat crude food exercise was very necessary. We find this vegetable so popular in early days as to have been a supper's addition ; and, no doubt, a light supper is most wholesome, when required at all.

We close our account of this species with the evening use of the radish :—

“ The customary rites
Of the last meal commence : a Roman meal
Such as the mistress of the world once found
Delicious, when her patriots of high note,
Perhaps by moonlight, at their humble doors,
And under an old oak's domestic shade,
Enjoy'd, spare feast, a radish and an egg.”

Thompson's Poem of "Liberty."

Our second native species of this genus is *Raphanus maritimus*, the Sea-radish. It is a very robust, tall plant, and grows rather sparingly on our shores ; from three to four feet high, and bearing its showy deep yellow blossoms in June or July. It is a biennial plant, which may fairly confer the name *radix* or radish on the genus, because its root is very thick, succulent, and fleshy ; the Greek word "*raphanos*," a root, being almost the Latin *raphanus*, which word botanists retain. The early gardeners carried out the root-producing eminence of radishes

to the extraordinary sizes produced in carrots, parsnips, mangel wurzel, and turnips, in our days. It is not certain that, in all cases, it was our sea-radish which underwent this enormous radication; but Pliny tells us that in Germany they have them with roots of a great size—this would make it probable that they were native plants exceedingly developed by much nurture, and a rapidly urged vegetation. This writer states that he has seen a radish weighing forty pounds; and Matthiöle magnifies this wonder to a radish which weighed one hundred pounds. If these marvels be true, modern mangel-growers are hid away under the ancient monstrosity; but—even taking those stories with great deductions, and swallowing such radishes cautiously, *cum grano salis*, for fear we should not “stomach” them, it is doubtful, in an economical account, whether the consumption of manure, labour, and care, produces a due return of profit to the agricultural artist—for such he is—who develops those vegetable enormities. For much further matter of entertaining knowledge about radishes, I must refer the inquirer to “Phillips’s History of Cultivated Vegetables.” He tells us that a Greek author wrote a whole book about them; and so, it seems, could a modern compiler, if it were the taste of the times to exhaust a subject. It is worth quoting, however, that when imitations of fruits and flowers, made of metal, ivory, &c., were devoted as offerings to the gods, the prototypes of turnips were made of lead, those of beet in silver, but those of radishes in gold. Ra-

beet in silver, but those of radishes in gold. Radishes have been used as a boiled vegetable and French peasants used them roasted; they also, in their raw state, possessed multitudes of cures for diseases, from hydrophobia and poisoning down to a rough skin, and which indeed belong, in some degree, as the ancients have said, to nearly every plant that grows. There are no less than sixteen varieties of cultivated radishes, but there is one, the black Spanish radish, which used to be known more than it is now; it might be profitable for the market-gardeners to revive it, as it is hardy, and, continuing uninjured by slight frosts, makes a desirable salad vegetable through most part of our winters. Reverence the radish, for you see it is said to be of universal value. The chemist formerly made use of the scraped rind for a blue colour, to change it into red by adding acids; the more convenient litmus has superseded this use. Sugar and radish-juice made a wheezing windpipe mellifluent; the juice resisted hypocondriacism, and was a great beautifier of the skin—two results which are, indeed, very much associated, as a troubled mind darkens the countenance, and engenders premature wrinkles. It was also used as an early kind of Macassar oil; for Gerarde reports that “the root, stamped with honey, and the powder of sheep’s heart dried, causeth hair to grow in short space.” *Sir John Falstaff* must have heard of one of those gross radishes to which we have had reference, when he makes a bundle of them his own diminutive, and says, respecting those who robbed him of the booty he had stolen, “If I fought not with fifty

of them, I am a bunch of radish: if there were not two or three and fifty upon poor old Jack, then am I no two-legged creature."

We now come to the last of the native *Cruciferae*, the *Subularia* called so from "*subula*," an awl, and "*re*," a thing or object. The lower leaves are curve-pointed like a cobbler's awl; and the plant is, consequently, an awl-like thing. The genus has but one species, the *Aquatica*, and that is found on shallow margins of lakes at great elevations. Mr. Edward Murphy, Professor of Agriculture in the Queen's College, Cork, is one of the few discoverers of this rarity. The old botanists never saw it, as it reposes under water in its plashy bed; and even now it would be a matter of pleasant exertion on mountaineering excursions to hunt it out in its alpine lake residence. Those, however, who have botanized for themselves some of the previous cross-bearing plants, will be so quick at distinguishing their characteristics, that even through the water this little crucifer would be readily recognised. In July, its short stalk and little white tetraform blossoms may be seen, springing from a neat small knot of green recurved awl-shaped leaves; if drawn up, its roots will be found long and numerous, adapted for holding a place in the muddy bottom whence it springs. The world is limited, as far as we are at present aware, to one genus, and this one species the *awl-wort*; we are honoured in the British Isles by providing the home of the little paddling pet of the mountain ponds. We do not find much to remark of this plant; it has not won a reputation in medicine-mongering or witchcraft.

Like the citizen in *Julius Cæsar*, it might say, if it could speak—"Truly, sir, *all* that I live by is with the *awl*: I meddle with no tradesman's matters, nor women's matters, but with awl." It has, in fact, only its name and its form, without a history of any economical kind whatever. We do, it is true, know of a certain *water-cobler*, but he could not get at our *awl-wort*, for he lives in the sea, and the mountain ponds or elevated lakes are inaccessible to him; with this difficulty before us, we cannot draw our plant into a legend with any facility, so we must record its residence in our poet Moore's lines, which will give it some touch of immortality:—

"On Lough Neagh's banks as the fisherman strays,
At the cold clear eve's declining,
He sees the round towers of other days
In the waves beneath him shining."

Close by stones and broken rubble, where the poet may imagine ancient fallen towers lie half imbedded in the lake, the *Subularia* appears; it is the Irish rush-cress—an admirably adapted name, constructed from its rush-like leaves and its cress-like blossom. This interesting little native ought to be in every aquatic garden. If planted in a pot of gravel with a little clay, and sunk in a quiet stream, it will grow readily; and then may be noticed by the curious, with facility, the unique fact of a flower in full bloom under the water. It is very probable, however, that the distribution of the pollen on the stigmas takes place before the petals open, and that in this way impregnation is secured; although the most usual fertilization of seeds takes place after the flower

expands in the air. We have not a poet who has noticed this water-nymph of the mountains, nor has any part of her name been versified upon directly, except we introduce Swift, using up a part of the name of our little cress chopped into an intellectual salad, as thus—

“A long ear’d beast, and a cobbler’s tool,
And a boy that’s only fit for school,
In summer is very pleasant and cool.”

Which riddle, read broad, is *ass-awl-lad* — “a salad.”

We have now gone steadily through the Irish cross-bearing plants, the *Tetradynamiæ* of Lin-næus. As the history of these plants has shown, they all make up a very natural family, or, in other words, have a very like general nature, though individual differences clearly distinguish them. With this summary, then, I bring their collected and abridged history to a close, knowing that, if it was given at full length, I should be in danger of excruciating my readers on a too long drawn out expansion of the *Cruciates*.

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